T I L CALCULATION PROGRAM

IN THIS APPENDIX

OVERVIEW

This Appendix provides the OCC-APR Program for use in reviewing an institution's TIL calculations and provides sample calculations and output sheets.

OCC-APR MICROCOMPUTER PROGRAM v3.2

INSTRUCTIONS

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ANNUAL PERCENTAGE RATE (APR) PROGRAM

INTRODUCTION

OCC-APR (Version 3.2) is a microcomputer package developed by Alan Dombrow, a national bank examiner in the Consumer Activities Division of the Office of the Comptroller of the Currency, Washington, D.C. This program is in the public domain and may be copied.

OCC-APR is intended to comport with the accuracy requirements of Regulation Z (12 CFR 226). All annual percentage rates are calculated using the actuarial method as defined in Appendix J to the regulation. Additionally, rules contained in Appendix D to the regulation are used to estimate disclosures for real estate construction and certain other multiple-advance loans.

Although great care has been taken in the preparation of the OCC-APR program, the OCC makes no warranty of complete accuracy. Further, the OCC does not recommend this program over other methods by which to calculate annual percentage rates. Any other method that meets the precise standards set out in 12 CFR 226.22(b) is permitted. Please refer to the Regulation Z Commentary, section 226.22(a)(1)(5) prior to use. Finally, these programs should be tested before first use and again periodically.

The microcomputer diskette contains the following three programs:

OCC – This is the start-up program. It contains brief background information and the APR Menu. The APR menu provides access to the regular annual percentage rate program (APR) and the real estate construction loan program (REC).

APR – This program calculates annual percentage rates for loans, using the actuarial method in Appendix J to Regulation Z. The REC program may be accessed from this program.

REC – This program calculates annual percentage rates for real estate construction and other multiple-advance loans under rules contained in Appendix D to Regulation Z and under the actuarial method in Appendix J. It includes a routine for estimating construction loan interest on a compounded basis under the rules in Appendix D of Regulation Z. The APR program may be accessed from this program.

Hardware and Software Requirements

An IBM PC, IBM XT, IBM AT, or IBM PC/2 (or compatible microcomputer that reads nine-sector disks) with at least 256K of random access memory (RAM) and an 80-column screen. Examples of compatible computers include the Corona, UNISYS PC (Sperry), the AT&T 6300 and the Compaq

MS-DOS or PC-DOS system software (version 2.0 or higher)

A printer configured for your computer (not required, but useful for retaining documentation)

Start-up Procedures

If you are using a hard drive system, just turn on your computer making sure that there is no disk in drive A (usually the left or the upper disk drive, but this varies by computer brand). Otherwise, insert your DOS operating system software into drive A and then turn on your computer. (The APR programs operate in the default drive.)

If your computer is already on, press the CTRL, ALT and DELETE keys simultaneously (with no disk in drive A if you will be using a hard drive). On 8088 r-C's, CTRL and ALT are gray keys on the left side of the keyboard and DELETE is at the bottom right of the keyboard

After the whirring noise stops and the flashing light goes out, respond to the date and time prompts. The A: prompt or C: prompt will appear after you have entered the date and time

If you are using a hard drive, insert the program disk in drive A. After the C: prompt, type COPY A:*.* C: and then press the return key. (You first may wish to create a subdirectory that will contain the APR programs.) The three programs on the program disk will copy to the hard drive

After the A: prompt or C: prompt, type OCC and press the return key. The program will load and run. Now you are ready to go

Since three separate programs on the disk are accessed, you should leave the disk in disk drive A (if you are not using a hard drive) until you are finished

APR Menu

When you enter OCC after the A prompt or C prompt, the first screen will appear. It will have a message from the OCC.

If your screen is able to display color, hit the letter C and the second screen, will appear in color. (If the colors are not satisfactory, start again and hit any key, except the letter C, to run the program in monochrome.)

If you have a monochrome screen, hit any key (except the letter C) and the APR Menu will appear without color. If your microcomputer has a monochrome screen with a color graphics adaptor card and you press the letter C, the program may not be completely readable. It would be safer in this case to select monochrome.

The second screen contains the APR Menu, which provides you with three options. You may select option 1 to access the regular APR program, option 2 to access the construction loan program or option 3 to quit. Type your selection and press the return key. If you select 1 or 2, it will take a few moments for the computer to load your selected program from the disk in drive A (or from the hard drive) into the computer's memory. You will then be ready to go.

Important: Since the APR Menu and the two APR Programs (APR and REC) are accessed individually, you need to make sure that the program disk is in drive A if you intend to change from one program to another and if you are not using a hard drive. However, while you are working with one of the programs (for example, APR), the program disk need not remain in the disk drive.

If you select option 3, you will exit the program. If there is a disk in drive A with the computer's disk operating system (DOS) on it, you will return to the A prompt. Otherwise, you should receive a message that requests you to put a disk with DOS on it in disk drive A or, if you are using a hard drive, the C prompt will appear.

APR PROGRAM

The regular annual percentage rate program (APR) is intended to comport with the accuracy requirements of Regulation Z (12 CFR 226). All calculations are based on the actuarial method as contained in Appendix J to the regulation.

The APR program is designed to calculate the following:

Annual Percentage Rate

Finance Charge

Total of Payments

Finance Charge Reimbursement

APR Reimbursement

-- Lump Sum Method

-- Lump Sum/Payment Reduction Method – Adjustment as of the Final Payment Date

The regular APR program also determines:

-- Whether a loan is regular or irregular

-- When a disclosed APR is understated or overstated

When a disclosed finance charge is understated or overstated

The appropriate reimbursement tolerance, including allowances for the 10% "obvious error" rule

Federal Reserve (Fed) Calendar measurements

This program does not compute the amount financed. It does, however, ask for the amount financed, since that value is necessary to calculate the APR. You must compute the amount financed independently. For example, if the loan amount is $50,000 and the consumer must pay a one point origination fee and $300 in prepaid interest at the closing of a real estate loan, the amount financed must be calculated at $50,000 minus $800, or $49,200.

The regular APR program does not compute payment schedules. As with the value of the amount financed, however, payment values are needed by the program to calculate the APR. It is important to note that the payment value required by this program is not necessarily principal and interest or interest only. Any finance charge paid by the consumer after consummation of the loan is a payment for Regulation Z purposes. For example, if monthly principal and interest payments are $600 and the consumer is required to include with each payment a $21 premium for mortgage guarantee insurance, the payment value entered into the program (and needed for Regulation Z disclosure purposes) would be $621.

The program's Fed Calendar, if selected, will measure the period of time between the date the finance charge begins to be earned (normally the loan date) and the date of any payment (normally used with the first payment). Rules governing the so-called Fed Calendar are set forth in Appendix J to Regulation Z and are applicable to the actuarial method of calculating APRs. This program does not ignore February 29 in a leap year.

Accessing the APR Program

The APR program is accessed from the APR Menu. The APR Menu is accessed by inserting the DOS disk in drive A and then, after obtaining the A prompt, inserting the OCC APR program disk in drive A. After the A prompt (or C prompt if you are using a hard drive), type OCC and press return. Read the first message screen.

If your screen is able to display color, press the letter C and the APR menu will appear in color. (If the colors are not satisfactory, start again and hit any key, except the letter C, to run the program in monochrome.)

If you have a monochrome screen, hit any key (except the letter C) and the APR Menu will appear without color. If your microcomputer has a monochrome screen with a color graphics adaptor card and you press the letter C, the program may not be completely readable. It would be safer in this case to select monochrome.

Try One Loan

If you wish to try a loan at this time to get a feel for the program, follow these steps:

Select option 1 for the regular APR program

The first screen has a message. After reading it, press any key (the space bar, for example) or the letter C, as appropriate, to get to the next screen

The next screen has a number of prompts that will require your response. You may make entries on this screen by first pressing any key, or you may skip this screen by pressing the CTRL and Page Down keys simultaneously. After you do either, you may return to the APR menu at any time by pressing the escape (ESC) key

If you enter an incorrect value, you will be given a chance to correct it after you respond to the last prompt on the screen

NOTE: The first input screen asks for information useful for printed documentation. On this screen you may enter any combination of letters, numbers, periods, commas, and minus signs, as well as the symbols / and &.

Entries are not required for this screen. As on any screen, unacceptable entries will result in a beep to warn you that you must make a different entry.

For the date, enter the current date (or any other date) in any format you wish

Enter your first name (If you wish you could enter your first and last name here and then skip the next prompt.)

Enter your last name

For the lender's name, enter any convenient name (for example, ABC National Bank)

Enter the name of the original creditor. Since the original creditor is often the same as the current lender, the program repeats the previous entry here. Just hit return to accept the creditor's name

For the borrower's name, enter the full name of any individual (for example, Aye 0. Plenty)

For the account number, enter any convenient number (for example, 111-23)

You are now at the end of the screen. At the end of most screens the program will ask if you wish to make any changes. There should be an "n" waiting there for you. Just hit the return key to accept the "n" (that is, no changes). If your previous entries are incorrect, type the letter "y" over the default value "n" and then hit return. You will then be given an opportunity to make changes

After you accept the letter "n", a new screen will appear. Beginning with this screen, your permissible entries will be limited to essentials. For the amount financed, type 5000 (do not use signs, or commas, for example $5,000 or 5,000) and hit the return key. If you make a mistake before hitting return, use the backspace key to erase your entry

For the disclosed annual percentage rate (APR), type 9.7 (not .097) and hit the return key

For the disclosed finance charge, type 25 and hit the return key. (*NOTE: If this were a new loan, no value would be entered here. You would just hit the return key.*)

For the payment frequency there should be a 1 waiting there for you. Just hit the return key to accept the 1 (the 1 is for monthly payment loans)

You are now at the end of the screen. This program will ask you if you wish to make any changes. The letter "n" should be waiting there for you. Just hit the return key to accept the "n"

A new screen will appear. Type 250 (which is the payment amount for this example) and hit the return key

For the number of payments, type 1 and hit the return key (This loan has an irregular first payment.)

For whole unit periods, use the Fed Calendar by typing ? and hitting the return key

The Fed Calendar computation window will appear at the bottom of the screen. For Date 1 (the loan date), type 01 10 1978 and hit the return key (Note that your entries skip over the "/" slash bar and that the program tells you that 1/10/78 was a Tuesday.)

For Date 2 (the first payment date), type 02 10 1978 and hit the return key (Note that the program tells you that 2/10/78 was a Friday and that there are 31 actual days between the two dates. It also completes the whole unit period and odd days responses for you, which now read 1 and 0, respectively.)

The program will ask you if you wish to make any changes. The letter "n" should be waiting there for you. Just hit the return key to accept the "n"

Your input values will clear and you will be prompted for the payment amount in the next payment stream. For the payment amount, type 230 and hit the return key

For the number of payments, type 23 and hit the return key

For whole unit periods, there should be a 2 waiting there for you. Accept the 2 by hitting the return key

For odd days, there should be a 0 waiting there for you. Accept the 0 by hitting the return key

The program will ask you if you wish to make any changes. There should be an "n" waiting there for you. Just hit the return key to accept the "n"

Your input values will clear and you will be prompted for the payment amount in the next payment stream. (If you let it, this process can go on with 200 new screens since that is how many payment streams the program is able to handle.) Hit the return key to compute the APR

Your work is just about done. The program will provide you with the information to make/verify disclosures. It will then let you know that:

-- The disclosed APR (the 9.7% value you input earlier) is understated by 0.3829 percent

-- The disclosed finance charge (the $25 value you input earlier) is understated by $515

-- Both the disclosed APR and disclosed finance charge violate Regulation Z accuracy requirements

Since neither disclosure is accurate, the 10% reimbursement rule for obvious errors would not apply. If the rule did apply, a message to that effect would appear

The program will ask if you wish reimbursement information. Type the letter "y" and hit the return key to obtain reimbursement information (If you had hit return to accept the "n", you would have been asked whether you wished to calculate another APR or if you wished a printout of your work.)

There should be a 2 waiting there for you, since this loan has a .25 percent reimbursement tolerance. Accept the 2 by hitting the return key

A new and final screen will appear which provides you with reimbursement information

For number of prior payments, type any number between one and 24 (for example, 16) and hit the return key

You are finished. When you are through looking at the last screen, type the letter "P" and hit the return key to obtain a printout of your work. You will be asked to make sure that your printer is ready. Then hit any key (except escape) to get a printout. When you are finished, or if you do not desire a printout at this time, type a 3 and hit the return key to exit the program. You will be returned back to the APR Menu. Hit return to accept 3, the default value. The A prompt will appear if the disk in drive A has DOS in it. You may remove your disk from the disk drive. If you are using a hard drive and no disk is in drive A, the C prompt will appear.

Instructions for Data Entry

Entering Data

The APR program will prompt you for entries. In most cases, there will be a small blinking light (the cursor) at the location where you will need to enter values into the computer. The cursor will not appear whenever the message, "Press any key to continue," appears on the bottom line of the screen. However, the message is highlighted in reverse video and there is a beep to direct your attention to the message.

Enter a number with the numeric keys at the top of the keyboard or the numeric pad on the right, then press the return key (on some computers this key may be designated by a bent arrow, RETURN, ENTER, or similar designation). You cannot use the numeric pad on the right side of the keyboard unless you press the Num Lock key at the top right. You may also type

letters (y, n, x or p) from the computer keyboard, using capital or small letters.

After typing an entry you may hit the backspace key to delete your entry and make a new one. Except when you hit the Escape key or after the prompts "PRESS ANY KEY TO CONTINUE (HIT C IF YOUR SCREEN PROVIDES COLOR)" and "HIT ANY KEY (EXCEPT ESC) TO OBTAIN A PRINTOUT," you will need to hit the return key to get the computer to accept your input.

Terminating The Program

You may terminate the program or begin again by pressing the escape (Esc) key at any time after the first message screen. When you hit the escape (Esc) key, all calculations will terminate but you will be returned to the APR Menu and given a chance to begin again. Type 2 and hit the return key if you wish to start a new APR calculation. You may also enter 2 if you wish to switch over to the REC program, or enter 3 to terminate the program.

Default Values

In some cases where an entry is requested, there will already be a value at the cursor location. This value is the default value. Whenever you wish to accept for your input the value already located at the cursor position (the default value), just hit the return key.

This program contains a number of default values to save you time. For example, when the program asks you to enter the payment frequency of the loan, the default value is initially set for 1 (monthly payment loan). It is set for 1 because the program assumes that your loan has monthly payments. Hit return and the program will accept the default value of 1 (monthly payment loan) as your input.

If you change the payment frequency default value by typing over it, your new value (for example, *2* - multiples of a month) will become the default value for the current and subsequent loans. It will remain that value until you change it again or terminate the program.

If you type over a default value and then change your mind, backspace over your entry. Your entry will disappear and the default value will reappear. Incidentally, the program will not permit you to backspace to a column previous to the one where you started. It also will not let you type past column 79 (that is, it will not let you type off the right edge of the screen) or move up any lines. To move down a line, you must hit the return key. Since the program does not use the arrow keys to move the cursor, the number keys on the number pad (located on the right side of the computer) may be used at all times if desired.

If you terminate the program, all default values are reset to their original values. For example, whenever you restart the program, the default value for payment frequency will always be 1 (for monthly payment loans).

Characters Used For Input

Depending on the entries requested, the APR program requires the following types of input:

Numbers

-- The digits 0 through 9 and one decimal point, as needed, are used. Dollar signs and commas may not be used (for example, $50,000 should be entered as 50000 or 50000.00). Hit the return key to enter the number

-- Except for the disclosed/estimated APR, the program will not accept for input any number that has more than two digits to the right of the decimal place

-- When a number is needed by the program, the program will accept only a number and only one decimal point per number. Any other reentry (except Esc) will generate a beep to let you know that your entry is invalid

Letters

-- Only the letters "y" (for yes), "n" (for no), "p" (for print) and "x" (for unusual payment frequencies) are used in the program. Each may be entered as a small or a capital letter. The return key must be pressed to enter the selection

-- When the program asks a question that requires the letter "y" or the letter "n", it will accept only one of those letters. Any other entry (except Esc) will generate a beep to let you know that your entry is invalid.

-- The letter "n" is the default value after a yes/no question, with one exception. When the program asks if you wish to calculate another APR, the default value is the letter "y".

Question Mark

-- The ? character may be input when the program permits it as an optional response. If the ? is entered, the Fed Calendar will appear

-- The ? is used to determine whole unit periods and odd days (as defined by Appendix J) to the first payment in any payment stream

Generally, it is used only for the first payment stream. Default values will take care of any remaining payment streams. Details on this subject are provided immediately below. You may wish to come back to those rather technical comments later and, for now, move below to the caption Processing a Loan.

Calendar Information

The program needs to know the period of time between the date of loan consummation (or a later date if the finance charge or any portion of the finance charge is earned beginning on such later date) and the date of the first payment. If this loan has more than one payment stream, the program also needs to know the period of time between loan consummation and the first payment of each subsequent payment stream

A payment stream is one or more payments of equal amounts payable over equal periods of time. Multiple advances are considered negative payments (for example, -100). The time period between the loan date and the date of the first payment in any payment stream may be irregular.

Under Appendix J of Regulation Z, periods of time are measured a special way, using the Fed Calendar. Periods of time are divided into unit periods (normally the length of a payment period) and fractional unit periods (for example, odd days that are less than a unit period)

The APR program will compute unit periods and fractional unit periods for you if you select the Fed Calendar option.

The APR program always assumes that the first loan payment will be due exactly one unit period from the date of consummation of the loan. The default value for unit periods is set at 1 and the default value for odd days is set for 0. For a monthly payment loan, that means it is assumed that the first payment is due one month (one monthly unit period) from the loan date. For a quarterly payment loan, the default value of 1 assumes that the first payment will be made 3 months (one quarterly unit period) from loan date. You may, of course, always change the default value by typing a new value in its place and hitting return

When a loan has more than one payment stream (for example, if it has different payment amounts or it has more than one kind of payment period - not counting the first payment period) the APR program produces a default value which assumes that the first payment in any subsequent payment stream occurs exactly one unit period after the last payment in the immediately preceding payment stream

-- For example, a loan that is to be repaid with 35 monthly payments of $500 and a 36th payment of $50,000 has two payment streams

-- The APR program will assume that there is one month and no odd days to the first payment in the first payment stream by printing a unit period default value of 1 and an odd days default value of 0

-- When you enter the second payment stream (payment no. 36), the program will assume that there are 36 months to the first payment in that payment stream (and there happens to be only one payment in the stream in this case). The default value for whole unit periods to the first payment in the second payment stream, which you should accept, is 36

-- Thus, as indicated above, the first payment in the second payment stream is assumed to occur exactly one unit period (one month in this case) after the last payment of the immediately preceding payment stream

-- Since most multiple-payment loans work this way, normally you will accept the default values for unit periods and odd days in subsequent payment streams. Only the first payment period may need to be established

NOTE: When using the Fed Calendar routine, if you input February 28 (or February 29 in a leap year as the payment date, the program will assume that periodic payments are due on the end of every month (or the end of some other calendar unit, such as calendar quarter). The program will not assume that payments are due on the 28th or 29th of each month.

-- If the first payment period is irregular, you must change the default values for unit periods and odd days accordingly. You can have the program do this for you, using the ? option (Fed Calendar), or you may change the default values yourself, following the rules in Appendix J of Regulation Z

-- If dates have been entered using the Fed Calendar and the Fed Calendar is selected again for a later payment stream, the loan date will appear. However, you will not be able to change it. Instead, the cursor will drop down one line to ask you for the due date of the first payment in the stream

Whatever you input for odd days, that value will continue to be the odd-days' value for later payment streams. If the 36-month loan above had one month and 15 days to the first payment (one whole unit period and 15 odd days), then the second payment stream would begin 36 months and 15 days from the loan date. The first payment in the second stream would still occur exactly one unit period (one month) after the last payment in the first payment stream

Processing a Loan

After you select the APR program from the APR Menu (option 1) and you press any key to continue (or hit C for color) to get past the initial Message screen, you will be ready to process a loan. The next screen requests identification information and may be skipped by hitting the CTRL and Page Down keys simultaneously. If you wish to provide the information requested, hit any key to continue. From that point on, you may leave the program by hitting the escape (ESC) key.

For each loan, information is requested as follows:

ENTER DATE: Enter the current date (or any other date) in any format you wish. As with any entry on this screen, you may just hit return to leave the field blank and move to the next field

ENTER YOUR FIRST NAME: Enter your first name. (If you wish, you could enter your first and last name here and then skip the next prompt.)

ENTER YOUR LAST NAME: Enter your last name

ENTER NAME OF LENDER: Enter this name of the financial institution that currently owns the loan

ENTER NAME OF ORIGINAL CREDITOR: Enter the name of the original creditor. This information is needed for reimbursement purposes, since generally only the original creditor would be requested to make adjustments for reimbursable violations. Since the original creditor is often the same as the current lender, the program repeats the previous entry here. Just hit return if you wish to accept the lender as the original creditor

ENTER BORROWER'S NAME: Enter the name of the primary obligor and, as desired and as room permits, enter any other name included on the note

ENTER ACCOUNT NUMBER: For the account number, enter the account number, if any, assigned to the loan

After you have entered an account number (or hit return to leave the field blank), the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit the return key to accept "n", the default value.

A new screen will appear where you will begin entering loan information, as follows:

ENTER AMOUNT FINANCED: Remember, enter no more than one decimal point, no dollar signs or commas and no more than two digits to the right of the decimal point. More importantly, you must calculate this value using Regulation Z requirements. If the loan amount is $4,000 and there are $120 in prepaid finance charges, then the amount financed must be entered as 3880, not as $3,880 (and most assuredly not as $4,000!). This value may be zero if one or more advances are scheduled for after consummation, but it may not be negative

NOTE: If you have a multiple-advance loan, the amount entered here is only the net advance as of the loan consummation date. For example, if $2,000 will be advanced at consummation but the consumer must pay a loan fee of $500 on that date, you would enter 1500 here for the amount financed. All subsequent advances are entered later as payment stream input using negative values.

ENTER DISCLOSED (OR ESTIMATED) APR: Any rate of one percent or greater must be entered here. Do not enter the decimal equivalent of the rate (for example, a disclosed or estimated rate of 12 percent should be entered as 12, not as .12). The program will use your input to begin its APR calculations. It will then state the correct APR in reverse video

If you enter the disclosed APR, the program will apply current Regulation Z accuracy tolerances to determine whether the disclosed rate is understated or overstated. If the disclosed rate is in error, the program will indicate that there is a violation and, for understatements, will default to the appropriate reimbursement tolerance. The reimbursement tolerance, which may be changed at your option, is then used to calculate APR reimbursement adjustments. If the disclosed rate is accurate, the program will state the correct APR.

*NOTE: If the program indicates that **the disclosed APR is overstated and in violation, the disclosed APR may still be correct.** This APR program follows the actuarial method, while the disclosed APR may have been computed under the U.S. Rule method (which is also permitted under Regulation Z). The U.S. Rule APR generally equals or is higher than the actuarial APR. Examiners generally focus attention on **understated** APRs.*

If you do not have a disclosed APR but wish to calculate an APR instead, you must still enter an estimated APR. The program will not crash if you enter an unreasonable rate, such as 1000 percent; however, it will overflow and ask you to begin again. Any reasonable rate may be used. For example, you could use the loan's simple interest rate or enter 12 every time. Of course, if it turns out that your APR estimate is understated you should ignore any violation or reimbursement information.

ENTER DISCLOSED FINANCE CHARGE (IF UNKNOWN, HIT RETURN): Negative values are not permitted. As with the APR input, if you enter the disclosed finance charge, the program will apply appropriate Regulation Z accuracy tolerances to determine whether the disclosed finance charge is understated or overstated. If it is in error, the program will indicate that there is a violation and, for understatements, will default to the appropriate reimbursement tolerance.

The reimbursement tolerance, which may be changed at your option, is then used to calculate the finance charge reimbursement adjustment (which is always calculated as a lump sum value). If the disclosed finance charge is accurate, the program will just state the correct finance charge. If you do not have a disclosed finance charge but wish to calculate a finance charge instead, enter a zero or just hit return. If you enter zero, the program will assume that you want it to calculate the finance charge and will not produce finance charge violation or reimbursement information.

If the disclosure statement actually had no finance charge disclosed, there would be a violation. Such finance charge violations, however, are not subject to regulatory reimbursement. The program will not identify such a violation.

ENTER PAYMENT FREQUENCY (USE TABLE BELOW): There are actually seven selections from which to choose. The X option is the same for installment and single payment loans. (The X option may be selected by entering an X or the number 9.) You should never have to use the X option, but feel free to try it. Be very careful, though, because the X option has fewer constraints than the other "user-friendly" options and it could get you into trouble if you are not familiar with Appendix J of Regulation Z

NOTE: To make the correct selection with certainty, you should have some familiarity with the narrative portions of Appendix J Regulation Z.

Installment loans, including loans with multiple advances, are covered by frequencies 1 through 4. Since installment loan payment schedules are all entered the same way, payment stream input for installment loans is treated separately below, under the caption Payment Stream Input Screen.

OPTION 1: This option, which is the original default value, is for monthly payment loans (for example, the unit period is one month). Payment amounts may be irregular and even some of the payment periods may be irregular, including the first payment period, or skip periods. If you choose this option, however, the majority of payments must be due monthly

If you select option 1, the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit the return key to accept "n", the default value. A new screen will appear where you will begin entering the payment schedule.

OPTION 2: This option is for loans that are payable in multiples of a month, including bimonthly, quarterly, semi-annually, annually or even every four months (again, the unit period is the payment period that occurs most often). Option 2 must not be used for monthly payment loans. Use only option 1 for monthly payment loans. Payment amounts may be irregular and even some of the payment periods may be irregular, including the first payment period or skip periods

If you select option 2 (by typing a 2 over the default value of 1 and then hitting return), the program will ask you to enter the number of months in the unit period. If the loan has quarterly payments, you would accept the default value of 3 waiting there for you. Just hit return. If the loan has payments due every two months, type a 2 over the 3 and then hit return. Whatever number of months you enter here, be sure that the loan requires a majority of its payments to be paid on that basis. The program will then ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

OPTION 3: This option is for loans that require semi-monthly payments (for example, payments due on the first and sixteenth of each month). Payment amounts may be irregular and even some of the payment periods may be irregular, including the first payment period, or skip periods. If you choose this option, however, the majority of payments must be due semimonthly (that is, the unit period is one-half month)

If you select option 3, the program will ask you if you wish to make any changes.

When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

OPTION 4: This option is for loans that are payable in multiples of a day, including daily, weekly, multiples of a week, or even every five days (again, the unit period is the payment period that occurs most often). Payment amounts may be irregular and even some of the payment periods may be irregular, including the first payment period or skip periods

If you select option 4, the program will ask you to enter the number of days in the unit period. If the loan has weekly payments, you would accept the default value of 7 waiting there for you. Just hit return. If the loan has payments due every four weeks, type a 28 over the 7 and then hit return. If the loan has payments due every 15 days (which is **NOT** the same as semimonthly payments), type a 15 over the 7 and then hit return. Whatever number of days you enter here, be sure that the loan requires a majority of its payments to be paid on that basis.

NOTE: Option 4 must not be used for monthly payment loans, semi-monthly payment loans or loans payable in multiples of a month.

The program will then ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

OPTION 5: This option is for single advances, single payment loans that have maturity periods of equal months (for example, the single payment is due in three, six or 12 calendar months). If interest only payments are due on a periodic basis, you have the option of treating the loan as an installment loan under frequencies 1 through 4 (or frequency X), or you may use this option after you increase the amount of the principal payment by the amount of accumulated interest. The former method is preferable for reimbursement and actuarial calculation purposes

If you select option 5, the program will ask you for the amount of the single payment. Type in the appropriate amount and hit return. The program then will ask you for the number of calendar months in the loan term. The default value is six months. If you do not know the number of months in the loan term, press the ? character and the Fed Calendar will help you. If the dates that you enter do not reflect equal months, you will be given an opportunity to switch over to option 6 for actual days.

Finally, the program will ask if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that recaps your input and prints the APR. It also provides violation information, if applicable.

OPTION 6: This option is for single advances, single payment loans that have maturity periods in terms of actual days (53 days or 90 days). If you use the Fed Calendar, it will also accept, at your option, a single advance, single payment loan with a maturity period of equal months (normally handled under option 5), but only if the term of the loan is one year or less (as required by Appendix J of Regulation Z)

As with option 5, if interest only payments are due on a periodic basis, you have the option of treating the loan as an installment loan or you may use this option after you increase the amount of the principal payment by the amount of accumulated interest. The former method is preferable for reimbursement and actuarial calculation purposes.

If you select option 6, the program will ask you for the amount of the single payment. Type in the appropriate amount and hit return. The program will then ask you for the following:

NOTE: If what follows seems confusing, ignore it and press the ? character to call up the Fed Calendar option to get the information you need. If the dates that you enter reflect equal months in excess of one year, you will be given an opportunity to switch over to option 5 for equal months.

ENTER NO. DAYS IN TIME UNIT PERIOD: If the loan term is one year or less, enter the actual number of days in the term (not to exceed 365). If the loan term is greater than one year, enter 365 for the number of days in the unit period (since a unit period must not exceed one year.

ENTER WHOLE UNIT PERIODS TO THE PAYMENT. If the loan term is one year or less, this value is 1. If the term is greater than one year, this value is the number of full calendar years in the loan term, counting backwards from the payment date.

ENTER NO. OF ODD DAYS: This value, which must be less than 365, is the actual number of days left over, going back to the loan date, after you determined the number of whole unit periods to the payment.

Finally, the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that recaps your input and prints the APR. It also provides violation information, if applicable.

OPTION X: This option, which is entered as a capital letter X, a small letter x or as the number 9, is for any loan. It only has one significant limitation, which is that the number of days in a year (as with the other frequency options) must be 360, 364 or 365. Also, this option assumes that you are very familiar with Appendix J of Regulation Z

If you select option X, the program will ask you for the number of days in the unit period and the number of days in the year. It then asks if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering the payment schedule.

Payment Stream Input Screen

The screen for payment stream input appears for all installment loans. Installment loans in the context of this program include real estate, consumer and commercial loans, as long as the loan is subject to Regulation Z and is to be repaid in two or more payments or includes two or more advances. As indicated earlier, the program will accept up to 200 different payment streams.

Each payment stream consists of a payment or a group of payments that are equal in amount and payable over equal payment periods (for example, monthly). A payment stream may have an irregular first payment period, which means that the period from the loan date to the date of the first payment in the payment stream may be different from the equal periods between payments.

Most installment consumer loans have only one payment stream. Loans with a final, irregular payment (for example, balloon-payment loans) normally have two payment streams, which are the regular payments and the final payment. Other loans, particularly in the real estate area, have two, three, four or more payment streams.

As payment streams are entered into the program, the screen (or monitor, or CRT) will let you know which payment stream you are on (it tracks your entries in payment stream order). However, you may enter payment streams in any order. The program will sort them out and recap them for you in the correct chronological order. (For example, if you enter a final balloon payment as the first payment stream and the regular payments as the second payment stream, the program will reverse them when it provides disclosure information.)

Payment streams are entered one at a time. The payment screen asks for the following:

ENTER PAYMENT AMOUNT: Enter a positive value for payments (for example, 500) or a negative value for advances -2000). A zero is not permitted in the first payment stream

Important: The payment amount entered must include any amounts that are finance charges (such as required credit life or mortgage guarantee insurance premiums). Also, do not net payments made by the consumer against advances made to the consumer if they are scheduled for the same date. Although the APR calculated by the program would be correct, the amount financed, finance charge and total of payments would be incorrect on the Disclosure Information Screen. In such cases, enter each value separately, using two different payment streams and identical unit period/odd days' values.

After all payment streams have been entered, hit the return key at the payment amount prompt to begin the APR calculation. The screen will clear before the calculation begins.

ENTER NO. OF PAYMENTS: Enter a positive integer that reflects the number of payments in the payment stream (for example, if a loan has 36 payments and the first and last payments are irregular, you would have three payment streams with one payment in the first stream, 34 payments in the second stream and one payment in the third stream)

ENTER WHOLE UNIT PERIODS (TO FIRST PAYMENT IN THIS STREAM): The program will make this entry and the next entry for you if you hit the ? character to call up the Fed Calendar. Otherwise, you must determine and enter the number of whole unit periods from the first payment in the payment stream back to the loan date (as required by Appendix J of Regulation Z)

This value initially defaults to 1 on the assumption that it will be at least one unit period (for example, at least one month) to the first payment of the loan. If the first payment is due less than one unit period from the loan date, this value should be changed to 0.

All subsequent payment streams will include default values (for the number of unit periods to the first payment in the subsequent stream) which assume that the first payment in the subsequent stream is due exactly one unit period after the last payment in the previous stream. For example, if a loan has 36 monthly payments with one month to the first payment and a final irregular payment, you would hit return to accept the first default value of 1 in the first payment stream. For the second payment stream the program will automatically change the default value to 36, which accurately reflects the whole number of unit periods from the loan date to the date of the 36th payment.

ENTER NO. OF ODD DAYS: The program would have made this entry for you if you had hit the ? character to call up the Fed Calendar. Otherwise, you must determine and enter the number of actual days between the loan date and the date of the first full unit period (as required by Appendix J of Regulation Z)

NOTE: The value for odd days initially defaults to 0 on the assumption that there will be no odd days in the first payment period. If the first payment period has odd days just type the correct number of odd days over the zero. All subsequent payment streams will assume for odd days the same value that you accept in the first payment stream. You may change that value at any time, when necessary.

After you enter or the Fed Calendar enters the number of odd days, you will be asked if you wish to make any changes. When you are satisfied with your entries, hit return to accept "n", the default value. You will then be prompted to enter information for the next payment stream. When there are no more payment streams to the loan, hit return at the payment amount prompt to calculate the APR and other disclosure information.

Disclosure Information Screen

After all payment streams have been entered, the program will calculate the finance charge, total of payments and, in reverse video, the annual percentage rate. The screen will show those values, along with a recap of the loan structure.

Disclosure information is presented as follows:

AMOUNT FINANCED: As is required by Regulation Z, the amount financed must never include any finance charges

FINANCE CHARGE: This value is the sum of all finance charges. It is calculated in the program by subtracting from the sum of all payments the value of the amount financed

TOTAL OF PAYMENTS: This value is the sum of all payments

PMT STREAM NUMBER: The payment streams are listed in chronological order, not necessarily in the order by which they were entered

PMT AMOUNT: The payment amount for each payment stream is listed. Advances are listed with minus signs before them

NO. OF PMTS: The number of payments in the payment stream

PDS -DAYS: The number of whole unit periods and number of odd days to the first payment in the payment stream

ANNUAL PERCENTAGE RATE: The APR under the actuarial method in Appendix J of Regulation Z

The Disclosure Information Screen also indicates when the disclosed APR or finance charge is inaccurate and by how much. It will also indicate whether an error is a violation. It then asks if you wish reimbursement information. Type the letter "y" and hit return if you do. The program will then ask for the reimbursement tolerance and default to the one appropriate for that loan. Hit return if you wish to accept the default value or select a different value and then hit return. You will not be given a chance to change your entry once it has been made. If there is APR reimbursement involved, the screen will clear and be replaced by the Reimbursement Information Screen.

The Disclosure Information Screen will also indicate whether an understated APR or understated finance charge is subject to the 10% obvious error rule. This provision states that if either the APR or the finance charge is accurate and the one that is inaccurate is 10% or less of the correct value, regulatory reimbursement will not be required (for example, an APR of 12% is disclosed as 1.2% or less). Although the program identifies the obvious error rule, it still permits reimbursement calculations.

If there is no APR reimbursement involved, this screen will print out the finance charge reimbursement amount (using the correct APR minus the value of the tolerance selected). The amount printed out will be zero if the finance charge reimbursement adjustment is less than $1.00. If there is an adjustment amount, it is a lump sum value that may be reimbursed on a straight-line, pro rata basis. If there is no APR adjustment, the current screen will ask whether you wish to calculate another APR. It will not produce a separate reimbursement screen.

Documentation Printout

Normally, any screen may be printed out as hard copy if (1) a printer is connected to the PC and (2) the keys SHIFT and PRTSC are pressed simultaneously (or, on some PC's, just the key PRINT SCREEN is pressed). However, the APR program has a move effective way of obtaining printed documentation.

To obtain a hard copy printout for documentation while using the APR program, enter the capital or small letter "p" whenever either of the following two prompts are on the bottom line of the screen:

Prompt 1: Do you wish to calculate another APR (y/n/p-print)?

Prompt 2: 1-another APR, 2-another adjustment, 3-APR Menu, P-printout:

After the letter "p" is entered, a statement will appear near the bottom of the screen as a reminder to make sure that the printer is connected, has paper and is on line. Then hit any key (except the escape key - ESC) to obtain a printout that summarizes all of the loan input and output. If you do not desire a printout after you have already entered the letter "p", hit ESC to return to the APR Menu.

Reimbursement Information Screen

This screen provides reimbursement information, but it will appear only if there is APR reimbursement involved. It requests only one item of information from you, the number payments scheduled to have been made as of the date of reimbursement. (You will not be given the normal opportunity to change your entry once it has been made. However, you will be able to calculate another adjustment using a different entry.) The more important information on this screen is highlighted in reverse video. The following information is provided by this final screen:

ADJUSTED APR: This value is used to calculate APR reimbursement adjustments. It is the disclosed APR plus the reimbursement tolerance selected from the previous disclosure screen

PRORATE FACTOR: This value is the present value of advances divided by the present value of payments. The prorate factor is used to calculate reduced payment values. For any given loan, if you multiply each original payment amount by the prorate factor, your answer is the value each payment should be for the loan to have an APR equal to the adjusted APR (which is one of the objectives of reimbursement)

APR ADJUSTMENTS OF FINAL PMT DATE: This value is the present value of payments minus the present value of advances (for example, the lump sum APR reimbursement adjustment as of the loan date) taken out to the date of the final payment, which is normally the maturity date of the loan. This value may be quite large, due to the time value of money. In essence, if the consumer's payments were not changed, it would take an adjustment of this amount (paid to this consumer at the final payment date) to ensure that the overall transaction has an APR equal to the adjusted APR

NOTE: This value does not apply to variable-rate loans. If this value is less than $1.00, there is no APR reimbursement. Also, for fixed-rate loans if this value is larger than the lump sum reimbursement for an understated finance charge, the APR (not the finance charge) understatement is reimbursable.

PMT STREAM NUMBER, ORIG. PMT, NO. OF PMTS, AND PDS - DAYS: The values shown under these columns repeat the information from the previous Disclosure Information Screen

ADJUSTED PMT: As discussed under Prorate Factor, this is the amount the payment should have been if the APR on the loan is to be equal to the adjusted APR. It appears in reverse video. Under the lump sum/payment reduction method of reimbursement, all future payments would be reduced to the adjusted payment value(s). If the payment stream involves advances, no value will be shown for the advance in this column. It will just state advance to let you know why there is no adjusted amount

LUMP SUM / PAYMENT REDUCTION METHOD: This value represents the adjustment, per payment, of all prior payments scheduled to have been made, aggregated as of the date of the last scheduled payment. It is the amount paid to the consumer if all future payments are reduced to the adjusted payment value(s). This method should be used for loans that are paid in full before their actual maturity dates. In those cases there would be no future payment reductions

For *adjustable-rate* loans, this value (as of the first rate-change date) normally is compared to the lump sum adjustment for any finance charge understatement, and the amount of reimbursement is the larger of the two. If the larger value to the consumer is the APR adjustment, payments due after the rate-change date would not be reduced. The lump sum amount, as of the rate-change date, is reimbursable. However, if reimbursement is made before the rate-change date (for example, the consumer is reimbursed at month 14 and the rate change date is month 36), you may either (1) adjust the lump sum amount, as of the rate change date, by determining its present value as of the date of reimbursement, or (2) determine the lump sum amount as of the reimbursement date and reduce those payments remaining up to and including the rate-change date.

LUMP SUM METHOD (WITH NO FUTURE PAYMENT REDUCTIONS): This value represents the per payment adjustment of all scheduled payments, aggregated as of the date of reimbursement. It is, as of reimbursement date, the sum of (1) the present value of per payment adjustments of remaining payments and (2) the future value of per payment adjustments of prior payments. It is the amount paid to the consumer if all future payments remain unchanged

FINANCE CHARGE ADJUSTMENT. This value appears only when applicable. If the adjustment is less than $1.00, there is no finance charge reimbursement required. The finance charge adjustment is determined as follows:

-- Your selected APR tolerance is subtracted from the correct APR (which was on the previous screen) to obtain an adjusted APR for finance charge tolerance purposes

-- The adjusted APR is used to calculate a new payment schedule, using the original amount financed (This is a complex process that involves another prorate factor.)

-- The total of payments of the new payment schedule is subtracted from the original total of payments. The answer is the finance charge dollar tolerance

-- The correct finance charge minus the disclosed finance charge and minus the finance charge tolerance equals the finance charge adjustment.

The finance charge adjustment is a lump sum value. It may be divided by the number of payments to determine an aggregate lump sum adjustment to cover past payment periods. Future payments could then be reduced by the amount of per payment adjustment.

Finally, this screen asks if you wish to calculate another APR, calculate another adjustment, go to the APR Menu or obtain a hard copy printout. You may obtain a printout for documentation by entering the capital or small letter "p". After the letter "p" is entered, a statement will appear near the bottom of the screen as a reminder to make sure that the printer is connected, has paper and is on line. Hit any key (except the escape key - ESC) to obtain a printout that summarizes all of the loan input and output. If you do not desire a copy after you have entered the letter "p", hit ESC to return to the APR Menu.

If a printout is not selected, hit return to start all over again, enter a 2 to calculate another adjustment or enter 3 to quit. If you quit, the computer will return you to the APR Menu.

If you hit return again to accept the default value of 3, you will exit the program. The C will appear if you are using a hard drive, otherwise, the A prompt will appear if there is a disk in the A drive that has DOS on it. You may then remove any disks still in the computer. If you are not using a hard drive, you may remove a disk from the computer whenever the red light is off, but it will not hurt the APR program disk if you leave it in while you are running the program. In fact, you may find it convenient to leave the disk in to switch over to the REC program.

REC PROGRAM

The real estate construction program (REC) is intended to comport with accuracy requirements of Regulation Z (12 CFR 226). All calculations are based on formulas in Appendix D of Regulation Z and the actuarial method as contained in Appendix J of Regulation Z.

The REC program is designed to calculate the following:

Amount Financed

Annual Percentage Rate (APR)

Finance Charge

Total of Payments

Finance Charge Reimbursement

APR Reimbursement

-- Lump Sum Method

-- Lump Sum/Payment Reduction Method

-- Adjustment as of the Final Payment Date

The REC program also determines:

When a disclosed APR is understated or overstated

When a disclosed finance charge is understated or overstated

The appropriate reimbursement tolerance, including allowances for the 10% obvious error rule

Construction period calendar measurements

Federal Reserve (Fed) Calendar measurements

This program is applicable only to loans that are subject to Appendix D of Regulation Z. It computes the amount financed but, again, only for loans subject to Appendix D of Regulation Z. As required under Appendix D of Regulation Z, the program calculates one value of the amount financed for disclosure purposes (which is displayed for your information) and another value of the amount financed for calculating the APR (which is not displayed but is used by the program internally).

For the program to compute the amount financed, it requires the following information (as applicable):

The construction loan commitment amount, which should not include interest

The prepaid finance charge amount, which should not include interest

The subsequently paid finance charge, which should not include interest

For example, if construction advances on which interest will accrue total $50,400, you would enter 50400 for the loan commitment amount. If the consumer must make a separate loan origination fee of $500 at the closing, you would enter the $500 as a prepaid finance charge. In addition, if the consumer pays $400 separately during construction for inspection fees, the $400 fee may be entered as a subsequently paid finance charge.

The REC program will compute the payment amount for construction-only loans (under selections 1 and 2). Since the payment calculated by the program for such loans consists only of principal and interest, any additional finance charge payable by the consumer before the construction phase should be included in the prepaid finance charge (for example, loan fees or inspection fees payable at consummation).

If a finance charge for a construction only loan, other than interest, is actually payable at maturity, you should increase the amount of the calculated interest by the amount of the additional finance charge. That way, the additional finance charge will be correctly reflected as part of the payment amount, rather than as a prepaid finance charge. Conversely, if construction interest is payable at consummation, it should be entered as a prepaid finance charge and not as part of the estimated interest amount.

The program will not compute payment schedules for the permanent phase of a construction loan (under selections 3 and 4). When construction and permanent financing are combined into a single transaction, amortization payment values must be determined independently and entered as requested by the program.

NOTE: The payment value required by this program for the permanent phase is not necessarily just principal and interest. Any finance charge paid separately by the consumer after the end of the construction phase is a payment for Regulation Z purposes.

> For example, if monthly principal and interest payments are $600 and the consumer is required to include with each payment a $21 premium for mortgage guarantee insurance, the payment value entered into the permanent phase of the program (and needed for Regulation Z disclosures) would be $621.

The REC program has two calendar routines, the construction phase calendar (for accruing interest) and the Fed Calendar (for calculating APRs). The construction phase calendar, if chosen, only applies to the construction phase of a combination construction/permanent loan. It measures the period of time between the date the finance charge begins to be earned (normally the loan date) and the date the construction phase ends. If construction phase interest is accrued differently from the six available options, you will be able to make your own entry by selecting interest accrual option 7.

The program's Fed Calendar, if selected, applies to the construction phase of construction only financing and to the permanent phase of a combination construction/permanent loan. It measures, using rules in Appendix D of Regulation Z, the period of time between the date the finance charge begins to be earned (normally the loan date) and the date of the end of the construction phase. In the permanent phase it also measures, using rules in Appendix J of Regulation Z, the time period between the end of the construction phase and the date of the first amortization payment or, as needed, to the first payment in any subsequent payment stream. This program does not ignore February 29 in a leap year.

For construction only financing, the estimated interest under the Fed Calendar is calculated in the same way as it is under the construction phase calendar. Interest is not compounded. However, use of the Fed Calendar means that the time period is also measured under the actuarial method contained in Appendix J of Regulation Z for the purpose of calculating an APR.

NOTE: The actuarial method measures time somewhat differently from the construction phase calendar.

For construction permanent financing that is combined in a single transaction, the Fed Calendar will measure the period of time between the date the finance charge begins to be earned and the date of any payment. For such loans, Regulation Z rules governing the measurement of the period in the construction phase are in Appendix D of Regulation Z (for example, a five-month construction phase equals 2-1/2 months), and rules governing the Fed Calendar are in Appendix J to the Regulation.

Accessing the REC Program

The REC program is accessed from the APR Menu. The APR Menu is accessed by inserting DOS disk in drive A and then, after obtaining the A: prompt, inserting the OCC-APR program disk in drive A. After the A: prompt (or C: prompt if you are using a hard drive), type OCC and hit return. Read the first message screen.

If your screen is able to display color, hit the letter C and the APR menu will appear in color. (If the colors are not satisfactory, start again and hit any key, except the letter C, to run the program in monochrome.)

If you have a monochrome screen, hit any key (except the letter C) and the APR Menu will appear without color. If your microcomputer has a monochrome screen with a color graphics adaptor card and you press the letter C, the program may not be completely readable. It would be safer in this case to select monochrome.

Try One Loan

If you wish to try a loan at this time to get a feel for the program, follow these steps:

Select option 2 for the real estate construction loan program

The first screen has a message. After reading it, press any key (the space bar, for example) or the letter C, as appropriate, to get to the next screen

The next screen has a number of prompts that will require your response. You may make entries on this screen by first hitting any key or you may skip this screen by pressing the CTRL and Page Down keys simultaneously. After you do either, you may return to the APR menu at any time by hitting the escape (ESC) key

If you enter an incorrect value, you will be given a chance to correct it after you respond to the last prompt on the screen

NOTE: The first input screen asks for information useful for printed documentation. On this screen you may enter any combination of letters, numbers, periods, commas, and minus signs, as well as the symbols / and &. Entries are not required for this screen. As on any screen, unacceptable entries will result in a beep to warn you that you must make a different entry.

For the date, enter the current date (or any other date) in any format you wish

Enter your first name (If you wish, you could enter your first and last name here and then skip the next prompt.)

Enter your last name

For the lender's name, enter any convenient name (for example, XYZ First Bank, N.A.)

Enter the name of the original creditor. Since the original creditor is often the same as the current lender, the program repeats the previous entry here. Just hit return to accept the creditor's name

For the borrower's name, enter the full name of any individual (for example, Aye 0. Plenty, II)

For the account number, enter any convenient number (for example, 111/23)

You are now at the end of the screen. At the end of most screens the program will ask if you wish to make any changes. There should be an "n" waiting there for you. Just hit the return key to accept the "n" (that is, no changes). If your previous entries are incorrect, type the letter "y" over the default value "n" and then hit return. You will then be given an opportunity to make changes

After you accept the letter "n", a new screen will appear. Beginning with this screen, your permissible entries will be limited to essentials. The screen asks you to select one of four possible loan types. Type the number 3 and hit return

The next screen will appear. For the amount of loan commitment, type 50000 (do not use $ signs, commas or decimal points, for example $50,000 or 50,000) and hit the return key. If you make a mistake before hitting return, use the backspace key to erase your entry

For the annual simple interest rate, type 10.5 (not .105) and hit the return key

For the prepaid finance charge, type 1000 and hit the return key

For the subsequently paid finance charge, hit return to enter a value of zero

For the interest accrual system, there should be a 1 there waiting for you. Just hit the return key to accept the 1 (the 1 is for a construction phase measured in months)

For the number of months in the construction period there should be a 5 there waiting for you

Although we want the 5, let's use the construction phase calendar to get it for us. Enter a ? on top of the number 5 and hit return

For Date 1 enter 03 20 1986 and hit return. *(Note that your entries skip over the / slash bar and the program tells you that 3/20/86 was a Thursday.)*

For Date 2 enter 08 20 1986 and hit return. *(Note that the program tells you 8/20/86 was a Wednesday and indicates that the number of months is 5.)*

You are now at the end of the screen. At the end of most screens, you will be asked if you wish to make any changes. The letter "n" should be waiting there for you. Just hit return to accept the "n" (that is, no changes). If your previous entries are incorrect, type the letter "y" over the default value "n" and then hit return. You will then be given an opportunity to make changes

A new screen will appear. The estimated construction interest is calculated by the program at $1,093.75 and is waiting there for you. Hit return to accept it.

For the disclosed APR enter 9 (that is, 9) and hit return. (*NOTE: If this were a new loan, any estimated rate of 1% or higher would be entered here*).

For the disclosed finance charge, enter 120000 (that is, $120,000) and hit return. *(NOTE: If this were a new loan, you would not enter a value here, you would just hit the return key.)*

For the payment frequency there should be a 1 waiting there for you. Just hit the return key to accept the 1 (The 1 is for monthly payment loans)

The program will ask you if you wish to make any changes. Hit the return key to accept "n", the default value

A new screen will appear. Type 457.37 (which is the payment amount for this example) and hit the return key

For the number of payments, type 360 and hit the return key

For whole unit periods, use the Fed Calendar by typing ? and hitting the return key

The Fed Calendar computation window will appear at the bottom of the screen. For Date 1 (the loan date) 03 20 1986 is waiting there for you. This is the date you entered in the construction phase of the program. Hit the return key to accept the date

For Date 2 (the end of the construction phase) 08 20 1986 is waiting there for you. This is also the date you entered in the construction phase of the program. Hit the return key to accept the date

For Date 3 (the amortization payment date) type 09 20 1986 and hit the return key. Note that the program tells you that 9/20/1986 was a Saturday and that there are 184 actual days between Date 1 and Date 3. It also completes the whole unit period and odd days responses for you, which now read 3 and 15, respectively. Those values reflect Appendix D of Regulation Z requirements that the first payment period must equal one-half the construction period (5/2 = 2.5) plus the period from the end of the construction phase to the date of the first amortization payment (2.5 plus 1 = 3.5 = 3 months and 15 days)

The program will ask you if you wish to make any changes. Hit the return key to accept "n", the default value

Your input values will clear and you will be prompted for the payment amount in the next payment stream. (If you let it, this process will go on with 200 new screens since that is how many payment streams the program is able to handle.) Hit the return key to compute the APR

Your work is just about done. The program will provide you with the information to make/verify disclosures. It will then let you know that:

-- The disclosed APR (the 9% value you input earlier) is understated by 1.7523 percent

-- The disclosed finance charge (the $120,000 value you input earlier) is overstated by $3,253.05

-- Both the disclosed APR and disclosed finance charge violate Regulation Z accuracy requirements

The program will ask if you wish reimbursement information. Type the letter "y" and press the return key to obtain reimbursement information (If you had hit return to accept the "n", you would have been asked whether you wished to calculate another APR or if you wished a printout of your work.)

There should be a 1 waiting there for you, since real estate construction and other multiple advance loans have a .25 percent reimbursement tolerance. Accept the 1 by hitting the return key

The reimbursement screen will appear next. For number of prior payments, type 9 and hit the return key. The highlighted portions of this screen indicate that:

-- The value of the APR adjustment as of maturity date would be $107,278.16

-- The APR lump sum / payment reduction reimbursement method includes a lump sum payment (as of month 9) of $516.25 and future payment reductions to $401.75

-- The lump sum reimbursement method requires a lump sum payment of $7,244.01

You are finished. When you are through reviewing the last screen, type the letter "p" and hit the return key to obtain a printout of your work. You will be asked to make sure that your printer is ready. Then hit any key (except escape) to get your printout. When you are finished, or if you do not desire a printout at this time, type a 3 and hit the return key to exit the program. You will be returned back to the APR Menu. Hit return to accept 3, the default value. The C: prompt will appear if you are using a hard drive. Otherwise, the A: prompt will appear if the disk in the A drive has DOS on it. You may then remove your disk from the disk drive.

Instructions for Data Entry

Entering Data

The REC program will prompt you for entries. In most cases, there will be a small blinking light (the cursor) at the location where you will need to enter values into the computer. The cursor will not appear whenever the message: Press any key to continue, appears on the bottom line of the screen. However, the message is highlighted in reverse video and there is a beep to direct your attention to the message.

You type your input from the computer keyboard and then press the return key (on some computers this key may be designated by a bent arrow, RETURN, ENTER, or similar designation). After typing an entry you may hit the back space key to delete your entry and make a new one. Except when you hit the Escape key or after the prompts "press any key to continue (hit C if your screen provides color)" and "hit any key (except esc) to obtain a printout," you will need to hit the return key to get the computer to accept your input.

Terminating The Program

You may terminate the program or begin again by pressing the escape (Esc) key at any time after the initial message screen. When you hit the escape (Esc) key, all calculations will terminate but you will be returned to the APR Menu and given one chance to begin again. Type 2 and hit the return key if you wish to start a new REC calculation. You may also enter 1 if you wish to switch over to the APR program or enter 3 to terminate the program.

Default Values

In some cases when an entry is requested, there already will be a value at the cursor location. This value is the default value. Whenever you wish to accept for your input the value already located at the cursor position (the default value), just hit the return key.

This program contains a number of default values to save you time. For example, when the program asks you to enter the payment frequency of the loan (during the permanent phase of a combined construction/permanent loan), the default value is

initially set for 1 (monthly payment loan). It is set for 1 because the program assumes that the permanent portion of your loan has monthly payments. Hit return and the program will accept the default value of 1 (monthly payment loan) for your input.

If you change the payment frequency default value by typing over it, your new value (for example, *2* - multiples of a month) will become the default value for the current and subsequent loans. It will remain that value until you change it again or terminate the program. If you type over a default value and then change your mind, backspace over your entry. Your entry will disappear and the default value will reappear. Incidentally, the program will not permit you to backspace to a column previous to the one where you started. It also will not let you type past column 79 (that is, it will not let you type off the right edge of the screen) or move up any lines. To move down a line, you must hit the return key. Since the program does not use the arrow keys to move the cursor, the number keys on the number pad (located on the right side of the computer) may be used at all times if desired.

If you terminate the program, all default values are reset to their original values. For example, whenever you reload the program the default value for payment frequency will be 1 (for monthly payment loans).

Characters Used For Input

Depending on the entries requested, the REC program requires the following types of input:

Numbers

-- The digits 0 through 9 and one decimal point, as needed, are used. Dollar signs and commas may not be used (for example, $50,000 should be entered as 50000 or 50000.00). Hit the return key to enter the number

-- Except for the annual simple interest rate and the disclosed/estimated APR, the program will not accept for input any number that has more than two digits to the right of the decimal place

-- When a number is needed by the program, the program will accept only a number and only one decimal point per number. Any other entry (except Esc) will generate a beep to let you know that your entry is invalid

Letters

-- Only the letters "y" (yes), "n" (no), "p" (print) and "x" (for unusual payment frequencies) are used in the program. Both may be entered as a small or a capital letter. The return key must be pressed to enter the selection

-- When the program asks a question that requires the letter "y" or the letter "n", it will accept only one of those letters. Any other entry (except Esc) will generate a beep to let you know that your entry is invalid

-- The letter "n" is the default value after a yes/no question, with one exception. When the program asks if you wish to calculate another APR, the default value is the letter "y"

Question Mark

-- The ? character may be input when the program permits it as an optional response. If the ? is entered, either the construction phase calendar or "Fed" Calendar will appear

In the final analysis the ? may be used to measure the period of time (as needed by Appendix D or defined by Appendix J of Regulation Z) to the first payment in any payment stream. In the permanent phase of a combination

loan, it in generally used only for the first payment stream. Default values will take care of any remaining payment streams. Details are provided below should you choose not to use the ? character. You may wish to come back to those rather technical comments later and, for now, move below to the caption – Processing a Loan.

Calendar Information

The program needs to know the period of time between the date of loan consummation (or a later date if the finance charge or any portion of the finance charge is earned beginning on such later date) and the date of the end of the construction phase. For combination construction/permanent loans, it also needs to know the remaining period of time to the date of the first amortization payment.

Construction Only Financing

For construction only financing, measurement of the construction period has two purposes.

The first is for calculating interest.

Whether you input the period of time or use the ? to have the calendar calculate it for you, the program will, under interest accrual options 1 through 6, compute estimated construction interest.

The second purpose is for calculating an APR

Whether you input the period of time or use the ? to have the calendar calculate it for you, the program will measure the period from the loan date to the end of the construction phase with compounding, as necessary under the actuarial method.

For example, in a construction only loan, if the construction period is 14 months, the actuarial method requires that the finance charge be compounded at the end of 12 months, since the construction phase is to be treated as a single-advance, single payment loan. This is the case even if the program calculated estimated interest over 14 months without compounding.

Although this program uses the actuarial method with Appendix D of Regulation Z, the U.S. Rule method for calculating the APR (which, under the formula in Appendix D of Regulation Z for construction only loans with maturities of more than one year will result in a higher APR than that obtained from the actuarial method) is also appropriate.

Combined Construction/Permanent Financing

Construction Phase

For combined construction/permanent financing, the construction period is measured only for calculating estimated construction interest

Permanent Phase

For interest calculation purposes, the construction period is always entered during the program's construction phase (either directly or through use of the ?). When you get to the permanent phase of the loan, you must enter, for APR calculation purposes, the period from loan date to the date of the first amortization payment. Appendix D of Regulation Z requires that the construction phase part of this period be divided in half. All other measurements of time are made under the rules in Appendix J of the Regulation

If you hit the ? to use the calendar, the program will measure the period from the loan date to the end of the construction phase and divide it in half under the rules in Appendix D of Regulation Z. For example, if the construction period is 5 months, Appendix D of Regulation Z requires that the construction period be treated as 2.5 months, or two months and 15 days. To that value the program will add the period from the end of the construction phase to the date of the first payment

If the loan date and the end of the construction phase date are entered earlier during the construction phase, they will appear as default values in the permanent phase. Once these two dates are entered using the Fed Calendar in the permanent phase, they cannot be changed in subsequent payment streams

If the loan has more than one payment stream, the program also needs to know the period of time between loan consummation and the first payment of each payment stream, again using the rules of Appendix D and Appendix J of Regulation Z

A payment stream is one or more payments of equal amounts payable over equal periods of time. Multiple advances are considered negative payments (for example, -100). The time period between the loan date and the date of the first payment in any payment stream may be irregular.

NOTE: Interest accrued during the construction phase is not considered part of any payment stream. For APR calculation purposes under Appendix D of Regulation Z, the estimated construction interest is treated as a prepaid finance charge.

Under Appendix J of Regulation Z, periods of time are measured a special way, using the Fed Calendar. Periods of time are divided into unit periods (normally the length of a payment period) and fractional unit periods (for example, odd days that are less than a unit period)

The REC program will compute unit periods and fractional unit periods for you if you elect the Fed Calendar option

The REC program makes no assumptions about the first payment period. There is no initial default value for unit periods or odd days. You must either enter unit periods and odd days, following Appendix D of Regulation Z and Appendix J of Regulation Z rules, or let the Fed Calendar do it for you

When a loan has more than one payment stream (for example, if it has different payment amounts or it has more than one kind of payment period not counting the first payment period), the REC program produces a default value which assumes that the first payment in any subsequent payment stream occurs exactly one unit period after the last payment in the immediately preceding payment stream

-- For example, a loan that is to be repaid with 35 monthly payments of $500 and a 36th payment of $50,000 has two payment streams

-- Assume that under Appendix D of Regulation Z there are three months to the first payment in the first payment stream

-- When you enter the second payment stream (payment no. 36), the program will assume that there are 38 months to the first payment in that payment stream (and there happens to be only one payment in the stream in this case). The default value for whole unit periods to the first payment in the second payment stream, which you should accept, is 38

-- Thus, the first payment in the second payment stream is assumed to occur exactly one unit period (one month in this case) after the last payment of the immediately preceding payment stream

-- Since most multiple payment loans work this way, you will usually be able to accept the default values for unit periods and odd days in subsequent payment streams. Only the first payment period may need to be established

Important: When using the Fed Calendar routine, if you input February 28 (or February 29 in a leap year) as the payment date, the program will assume that periodic payments are due at the end of every month (or the end of some other calendar unit, such as calendar quarter. The program will not assume that payments are due on the 28th or 29th of each month.

-- If dates have been entered using the Fed Calendar, and the Fed Calendar is selected again for a later payment stream, the loan date and end of construction date will appear

However, you will not be able to change them. Instead, the cursor will drop down to ask you for the due date of the first payment in the stream.

-- Whatever is input for odd days in the first payment period, that value will continue to be the odd-days' value for later payment streams unless, for good reason, you change it

If the 36-month loan above had three months and 15 days to the first payment (three whole unit periods and 15 odd days), then the second payment stream would begin 38 months and 15 days from loan date. The first payment in the second stream would still occur exactly one unit period (one month) after the last payment in the first payment stream and the odd days' entry would again be 15.

Processing a Loan

After you select the REC program from the APR Menu (option 2) and you press any key to continue (or hit C for Color) to go past the initial message screen, you will be ready to process a loan. The next screen requests identification information and may be skipped by hitting the CTRL and Page Down keys simultaneously. If you wish to provide the information requested, hit any key to continue. From that point on you may leave the program by hitting the escape (Esc) key.

For each loan, information is requested as follows:

ENTER DATE: For the date, enter the current date (or any other date) in any format you wish. As with any entry on this screen, you may just hit return to leave the field blank and move to the next field

ENTER YOUR FIRST NAME: Enter your first name (If you wish, you could enter your first and last name here and then skip the next prompt.)

ENTER YOUR LAST NAME: Enter your last name

ENTER NAME OF LENDER: For the lender's name, enter the name of the financial institution that currently owns the loan

ENTER NAME OF ORIGINAL CREDITOR: Enter the name of the original creditor. This information is needed for reimbursement purposes, since generally only the original creditor would be requested to make adjustments for reimbursable violations. Since the original creditor is often the same as the current lender, the program repeats the previous entry here. Just hit return if you wish to accept the lender as the original creditor

ENTER BORROWER'S NAME: For the borrower's name, enter the name of the primary obligor and, as desired and as room permits, enter any other name included on the note

ENTER ACCOUNT NUMBER: For the account number, enter the account number, if any, assigned to the loan

After you have entered an account number (or hit return to leave the field blank), the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit the return key to accept "n", the default value.

A new screen will appear where you will begin entering loan information, as follows:

PLEASE SELECT THE NUMBER ABOVE (14) THAT REFLECTS THE LOAN TYPE: Only the values 1, 2, 3 or 4 will be accepted for input. After you enter your selection, the program will ask you if you wish to make any changes. When you are satisfied with your entry, hit return to accept "n", the default value. A new screen will appear that requests information relating to the construction phase of the loan

ENTER LOAN COMMITMENT (DO NOT INCLUDE INTEREST): Remember, enter no more than one decimal point, no dollar signs or commas and no more than two digits to the right of the decimal point. This value must be greater than zero and should include the aggregate of any amounts on which interest will accrue, including inspection fees or other finance charges that will be financed. The amount entered here should not include interest. (If the loan commitment does include interest, it should first be deducted out to arrive at a net commitment amount on which interest will accrue.)

NOTE: If you have a loan where advances will be made after the end of the construction phase, the amount entered here is only the portion of the commitment amount to be allocated for the construction phase. For example, if the entire commitment amount is $52,000 and $50,000 will be advanced in periodic draws to construct the dwelling, you would enter $50,000 here for the amount of the loan commitment. All subsequent advances ($2,000 worth) would be entered later as payment stream input (that is, as negative payments).

ENTER THE ANNUAL SIMPLE INTEREST RATE: Any rate of one percent or greater must be entered here. Do not enter the decimal equivalent of the rate (for example, a disclosed or estimated rate of 12 percent should be entered as 12, not as .12). The program will use your input to estimate interest on amounts disbursed during the construction phase

ENTER PREPAID FINANCE CHARGE: Negative values are not permitted. Prepaid finance charges entered here are finance charges (other than interest) that are either paid separately before consummation or included in the commitment amount and deducted from loan proceeds after consummation. They generally might include buyer's points, loan origination fees, required credit life insurance premiums, mortgage guarantee insurance premiums, or inspection fees. Enter zero or just hit return if there are no prepaid finance charges

ENTER SUBSEQUENTLY PAID FC (DO NOT INCLUDE INTEREST): Negative values are not permitted. Finance charges entered here are finance charges (other than interest) that are paid separately by the borrower after consummation. They generally might include required credit life insurance premiums, mortgage guarantee insurance premiums, or inspection fees. Enter zero or just hit return if there are no finance charges paid separately by the consumer after consummation

ENTER THE NUMBER BELOW (1-7) THAT REFLECTS THE INTEREST ACCRUAL SYSTEM FOR THE CONSTRUCTION PHASE: If you select option 1-6, the REC program will estimate the construction period interest. If you select option 7, you will have to enter your own estimated interest value

-- *OPTION 1 (WHOLE MONTHS):* This option, which is the original default value, is for construction periods that are measured in months. All months are considered equal and there are no odd days. Construction interest is not compounded under this option

If you select option 1, the program will ask you to enter the number of months in the construction phase. You may accept the default value (5), enter a new value or hit ? to enter dates, in which case the program will calculate the number of months for you.

Note that for construction only loans, the ? triggers the Fed Calendar, while for construction/permanent combination loans it triggers a "whole-months" calendar. In either case, interest is estimated without compounding.

When the value is entered, the program asks if you wish to make any changes. When you are satisfied with your entries up to this point, hit the return key to accept "n", the default value. A new screen will appear that displays (unless you selected option 7) the estimated construction interest and asks for additional information.

-- *OPTION 2 (WHOLE MONTHS - with compounded interest):* This option operates in the same way as option 1, except that it compounds estimated construction period interest under the rules in Appendix A of Regulation Z. This option assumes that interest is paid from a required interest reserve account

-- *OPTION 3 (ACTUAL DAYS):* This option is for construction periods that are measured in days. Months have actual days and a year has 365 days. Construction interest is not compounded under this option

If you select option 3 and the credit is a construction/permanent combination loan, the program will ask you to enter the number of days in the construction phase. You may enter a value or hit ? to enter dates, in which case the program will calculate the number of days for you.

If the credit is a construction only loan, the program will ask you to enter the number of days in the construction phase, the number of unit periods and the number of odd days. You may enter appropriate values, as required by Appendix J of Regulation Z, or hit ? to enter dates, in which case the program will calculate the necessary values for you. If what follows is confusing, just ignore it and press the ? for the computer to get the information you need.

-- *ENTER NO. DAYS IN THE CONSTRUCTION PHASE:* If the construction phase is one year or less, enter the actual number of days in the construction phase as requested (not to exceed 365). However, if the construction phase is greater than one year, you must enter 365 for the number of days in the construction phase, because a unit period may not exceed one year

-- *ENTER NO. OF UNIT PERIODS:* If the construction phase is one year or less, this value should be 1. If the construction period is greater than one year, this value is the number of full calendar years in the construction period, counting backwards from the payment date

-- *ENTER NO. OF ODD DAYS:* This value, which must be less than 365, is the actual number of days left over, going back to the loan date, after you determined the number of whole unit periods to the payment

Note that for construction only loans, the ? triggers the Fed Calendar, and for construction/permanent loans that are combined, it triggers an actual day calendar. In either case, interest is estimated without compounding.

The program will then ask you if you wish to make any changes. When you are satisfied with your entries, hit return to accept "n", the default value. A new screen will appear that displays (unless you selected option 7) the estimated construction interest and asks for additional information.

-- *OPTION 4 (ACTUAL DAYS - with compounded interest):* This option operates in the same way as option 3, except that it compounds estimated construction period interest under the rules in Appendix A of Regulation Z. This option assumes that interest is paid from a required interest reserve account

-- *OPTION 5 (ACTUAL DAYS):* This option is for loans that have interest calculated by using a daily interest rate that is the annual rate divided by 360. However, the daily rate is applied against the loan balance using actual days in the construction phase. Construction interest is not compounded under this option

If you select option 5, the program will ask you the same information that it asks under option 3. The only difference between the two options is reflected internally, by the way in which interest is estimated. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that displays (unless you selected option 7) the estimated construction interest and asks for additional information.

-- *OPTION 6 (ACTUAL DAYS - with compounded interest): This* option operates in the same way as option 5, except that it compounds estimated construction period interest under the rules in Appendix A of Regulation Z. This option assumes that interest is paid from a required interest reserve account

-- *OPTION 7 (OTHER):* This option is for loans that have interest calculated by an accrual system different from those described under the first six options. Under this option, the REC program will not be able to estimate construction interest. Instead, the estimated interest will have to be entered as input.

If you select option 7 and the credit is construction/permanent combination loan, the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that asks for your own estimate of construction interest and additional information.

If the credit is a construction only loan, the program will ask you to select from two additional choices. These choices must reflect how the construction period is to be measured for APR calculation purposes. The first choice is for whole months and the second choice is for actual days.

If the whole months choice (1) is selected, the program will then ask for the number of months in the construction period, in the same manner as under the whole months option 1 above. When you are satisfied with your entries, hit return in response to the request for any changes to accept "n", the default value. A new screen will appear that asks for your own estimate of construction interest and additional information.

If the actual days choice (2) is selected, the program will then ask for the number of days in the construction phase, the number of unit periods and the number of odd days, in the same manner is under the actual days options 3, 4, 5 and 6. (Remember, the number of days entered for the construction phase must not exceed 365. Any period of time in excess of one year will be reflected by either the number of unit periods or number of odd days.)

When you are satisfied with your entries, hit return in response to the request for any changes to accept "n", the default value.

A new screen will appear that asks for your own estimate of construction interest and additional information:

ESTIMATED CONSTRUCTION INTEREST (ACCEPT OR ENTER AMOUNT): If you select any of the first six options for the interest accrual system, there will be an interest value waiting here for you. If you wish to accept that value, just hit return. If you wish to change it to a different value, or if you earlier selected option 7 for the interest accrual system, just enter the amount of your estimated interest. Remember, enter no more than one decimal point, no dollar signs or commas and no more than two digits to the right of the decimal point. This value cannot be negative

ENTER DISCLOSED (OR ESTIMATED) APR: Any rate of one percent or greater must be entered here. Do not enter the decimal equivalent of the rate (for example, a disclosed or estimated rate of 12 percent should be entered as 12, not as .12). The program will use your input to begin its APR calculations. It will then state the correct APR in reverse video. If you enter the disclosed APR, the program will apply current Regulation Z accuracy tolerances to determine whether the disclosed rate is understated or overstated. If the disclosed rate is in error, the program will indicate in reverse video that there is a violation and, for understatements, will default to the appropriate reimbursement tolerance. The reimbursement tolerance, which may be changed at your option, is then used to calculate APR reimbursement adjustments. If the disclosed rate is accurate, the program will just state the correct APR.

NOTE: If the program indicates that the disclosed APR is overstated and in violation, ***the disclosed APR may still be correct.*** *This APR program follows the actuarial method, while the disclosed APR may have been computed under the U.S. Rule method (which is also permitted under Regulation Z). The U.S. Rule APR generally equals or is higher than the actuarial APR. Examiners generally focus attention on understated APRs.*

Even if you do not have a disclosed APR but wish to calculate an APR instead, you must enter an estimated APR. The program will not crash if you enter an unreasonable rate, such as 1000 percent; however; it will overflow and ask you to begin again. Any reasonable rate may be used. For example, you could use the loan's simple interest rate or you could enter 12 every time. Of course, if it turns out that your APR estimate is understated, you should ignore any violation or reimbursement information.

ENTER DISCLOSED FINANCE CHARGE (IF UNKNOWN, HIT RETURN): Negative values are not permitted. As with the APR input, if you enter the disclosed finance charge, the program will apply appropriate Regulation Z accuracy tolerances to determine whether the disclosed finance charge is understated or overstated. If it is in error, the program will indicate that there is a violation and, for understatements, will default to the appropriate reimbursement tolerance. The reimbursement tolerance, which may be changed at your option, is then used to calculate the finance charge reimbursement adjustment (which is always calculated as a lump sum value). If the disclosed finance charge is accurate, the program will just state the correct finance charge

If you do not have a disclosed finance charge but wish to calculate a finance charge instead, enter a zero or just hit return. The program will assume that you want it to calculate the finance charge and will not produce finance charge violation or reimbursement information. If the disclosure statement actually had no finance charge disclosed, there would be a violation (such finance charge violations, however, are not subject to regulatory reimbursement). The program will not identify such a violation.

ENTER PAYMENT FREQUENCY (USE TABLE BELOW): There are six selections from which to choose. To make the correct selection, you might need to review the narrative portions of Appendix J of Regulation Z

Installment loans, including loans that involve advances made after the end of the construction period, are covered by frequencies 1 through 4. Since installment loan payment schedules are all entered the same way, payment stream input for installment loans is treated separately below, under the caption – Payment Stream Input Screen. The four available options are:

-- *OPTION 1*: This option, which is the original default value, is for monthly payment loans (that is, the unit period is one month). Payment amounts may be irregular and some of the payment periods may even be irregular, including the first payment period or skip periods. If you choose this option, however, the majority of payments must be due monthly

If you select option 1, the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit the return key to accept "n", the default value. A new screen will appear where you will begin entering the payment schedule.

-- *OPTION 2:* This option is for loans that are payable in multiples of a month, including bimonthly, quarterly, semi-annually, annually or even every four months (again, the unit period is the payment period that occurs most often). Option 2 must not be used for monthly payment loans. Use only option 1 for monthly payment loans. Payment amounts may be irregular and even some of the payment periods may be irregular, including the first payment period or skip periods

If you select option 2 (by typing a 2 over the default value of 1 and then hitting return), the program will ask you to enter the number of months in the unit period. If the loan has quarterly payments, you would accept the default value of 3 waiting there for you. Just hit return. If the loan has payments due every two months, type a 2 over the 3 and then hit return. Whatever number of months you enter, be sure that the loan requires a majority of its payments to be paid on that basis. The program will then ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

-- *OPTION 3:* This option is for loans that require semi-monthly payments (for example, payments due on the first and sixteenth of each month). Payment amounts may be irregular and some of the payment periods may even be irregular, including the first payment period or skip periods. If you choose this option, however, the majority of payments must be due semimonthly (that is, the unit period is one-half month)

If you select option 3, the program will ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

-- *OPTION 4:* This option is for loans that are payable in multiples of a day, including daily, weekly, multiples of a week, or even every five days (again, the unit period is the payment period that occurs most often). Payment amounts may be irregular and some of the payment periods may even be irregular, including the first payment period or skip periods.

If you select option 4, the program will ask you to enter the number of days in the unit period. If the loan has weekly payments, you would accept the default value of 7 waiting there for you. Just hit return. If the loan has payments due every four weeks, type a 28 over the 7 and then hit return. If the loan has payments due every 15 days (which is not the same as semi- monthly payments), type a 15 over the 7 and then hit return. Whatever number of days you enter here, be sure that the loan requires a majority of its payments to be paid on that basis.

NOTE: Option 4 must not be used for monthly payment loans, loans payable in multiples of a month or semi-monthly payment loans.

The program will then ask you if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear where you will begin entering payments.

-- *OPTION 5:* This option may be selected when the permanent phase of the loan has only a single payment and no advances are made after the end of the construction phase. The entire payment period, including one-half of the construction phase, must be measured in equal months. If interest only payments are due on a periodic basis after the end of the construction phase, you have the option of treating the loan as an installment loan under frequencies 1 through 4 or you may use this option after you increase the amount of the principal payment by the amount of accumulated interest. The former method is preferable for reimbursement and actuarial calculation purposes.

If you select option 5, the program will ask you for the amount of the single payment. Type in the appropriate amount and hit return. The program then will ask you for the sum of one-half the construction phase plus the remaining number of months from the end of the construction phase to the date of the payment. This value must be in equal months (for example, this option would not be used with a construction phase of five months and a payment due 17 months from loan date because that period is treated as a 14.5-month payment period under Appendix D of Regulation Z). If you hit ? to have the program measure this period for you and the dates that you enter do not reflect equal months, you will be given an opportunity to switch over to option 6 for actual days.

Finally, the program will ask if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that provides you with information needed to make proper disclosures and that also provides violation information, if applicable.

-- *OPTION 6:* This option may be selected when the permanent phase of the loan has only a single payment and no advances are made after the end of the construction phase. The entire payment period, including one-half of the construction phase, must be measured in actual days (for example, 53 or 180 actual days). It will also accept, at your option, a single payment loan with a maturity period of equal months (normally handled under option 5), but only if the entire term of the loan, (again including one-half of the construction phase) is one year or less.

As with option 5, if interest only payments are due on a periodic basis after the end of the construction phase, you have the option of treating the loan as an installment loan or you may use this option after you increase the amount of the principal payment by the amount of accumulated interest. The former method is preferable for reimbursement and actuarial calculation purposes.

If you select option 6, the program will ask you for the amount of the single payment. Type in the appropriate amount and hit return.

The program will then ask you for the following:

NOTE: If what follows is confusing to you, ignore it and press the ? character to call up the Fed Calendar option to get the information you need. Otherwise, note that the loan term is the sum of the period from the end of the construction period to the date of the payment plus one-half of the construction period. If you hit ? to have the program measure this period for you, and the dates that you enter reflect equal months in excess of one year, you will be given an opportunity to switch over to option 5 for equal months.

-- *ENTER NO. DAYS IN THE UNIT PERIOD*: If the loan term is one year or less, enter the actual number of days in the term (not to exceed 365). If the loan term is greater than one year, enter 365 for the number of days in the unit period (since a unit period may not exceed one year.)

-- *ENTER WHOLE UNIT PERIODS TO THE PAYMENT:* If the loan term is one year or less, this value should be 1. If the term is greater than one-year, this value is the number of full calendar years in the loan term, counting backwards from the payment date

-- *ENTER NO. OF ODD DAYS:* This value, which must be less than 365, is the actual number of days left over, going back to the loan date, after you determined the number of whole unit periods in the payment period

Finally, the program will ask if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. A new screen will appear that provides you with information needed to make proper disclosures and that also provides violation information, if applicable.

Payment Stream Input Screen

The screen for payment stream input appears for all installment loans. Installment loans in the context of this program include real estate construction and other multiple advance loans that are subject to Regulation Z (including Appendix D of Regulation Z) and that are to be repaid (after the end of the construction phase) in two or more payments or include two or more advances. As indicated earlier, the program will accept up to 200 different payment streams.

Each payment stream consists of a payment or a group of payments that are equal in amount and payable over equal payment periods monthly). A payment stream may have an irregular first payment period. That means that the period from the loan date to the date of the first payment in the payment stream may be different from the equal periods between payments. (Because of the requirements of Appendix D of Regulation Z, all installment loan selections will include irregular first payment periods)

Many real estate construction loans have only one payment stream. Loans with a final, irregular payment (for example, balloon payment loans) normally have two payment streams, which are the regular payments and the final payment. Other loans have two, three, four or more payment streams.

As payment streams are entered into the program, the screen (or monitor, or CRT) will let you know which payment stream you are on (it tracks your entries in payment stream order). However, you may enter payment streams in any order. The program will sort them out and disclose them for you in the correct chronological order. (For example, if you enter a final balloon payment as the first payment stream and the regular payments as the second payment stream, the program will reverse them when it provides disclosure information.)

Payment streams are entered one at a time. The payment screen asks for the following:

ENTER PAYMENT AMOUNT: Enter a positive value for payments (for example, 500) or a negative value for advances (for example, -2000). A zero is not permitted in the first payment stream

Important: The payment amount entered must include any amounts that are finance charges (such as required credit life or mortgage guarantee insurance premiums). Also, do not net payments made by the consumer against advances made to the consumer if they are scheduled for the same date.

Although the APR calculated by the program would be correct, the amount financed, finance charge and total of payments would be incorrect on the Disclosure Information Screen. In such cases, enter each value separately, using two different payment streams and identical unit period odd days' values.

After all payment streams have been entered, hit the return key at the payment amount prompt to begin the APR calculation. The screen will clear before the APR calculation begins.

ENTER NO. OF PAYMENTS: Enter a positive integer that reflects the number of payments in the payment stream (for example, if a loan has 60 payments and the first and last payments are irregular, you would have three payment streams with one payment in the first stream, 58 payments in the second stream and one payment in the third stream)

ENTER WHOLE UNIT PERIODS (TO FIRST PAYMENT IN THIS STREAM): The program will make this entry and the next entry for you if you hit the ? character to call up the Fed Calendar. Otherwise, you must determine and enter the number of whole unit periods by measuring the period from the first payment in the payment stream back to the end of the construction phase. To this value you must add one-half of the construction period

Whole unit periods are then calculated from that total. Days in excess of whole unit periods are odd days, to be entered next.

All subsequent payment streams will include default values (for the number of unit periods to the first payment in the stream) which assume that the first payment in the stream is due exactly one unit period after the last payment in the previous stream. (For example, if a loan has 60 monthly payments with four months to the first payment and a final irregular payment, you would enter 4 for whole unit periods in the first payment stream. For the second payment stream the program will automatically change the whole unit periods value to 63, which accurately reflects the whole number of unit periods from the loan date to the date of the 60th payment.)

ENTER NO. OF ODD DAYS: The program will make this entry for you if you press the ? character to call up the Fed Calendar. Otherwise, you must determine and enter the number of actual days in excess of full unit periods (as required by Appendix J of Regulation Z, but with consideration to Appendix D of Regulation Z requirements) between the loan date and the date of the first amortization payment in the stream

After you or the Fed Calendar enters the number of odd days, you will be asked if you wish to make any changes. When you are satisfied with your entries up to this point, hit return to accept "n", the default value. You will then be prompted to enter information for the next payment stream. All subsequent payment streams will assume for odd days the same value that you accept in the first payment stream. You may change that value at any time, when necessary. When there are no more payment streams, hit return at the payment amount prompt to calculate the APR and other disclosure information.

Disclosure Information Screen

After all payment streams have been entered, the program calculates disclosure information, such as the amount financed, prepaid finance charge (needed when the amount financed is itemized), finance charge, total of payments and, in reverse video, the annual percentage rate. The screen will show those values, along with a recap of the loan structure.

Disclosure information is presented as follows:

AMOUNT FINANCED: Under Appendix D of Regulation Z, the amount financed is the commitment amount less any prepaid finance charges. Since the amount financed under Regulation Z must never include any finance charges, the value disclosed here is the commitment amount less any prepaid finance charges

PREPAID FINANCE CHARGE: This value, which is not determined by the REC program, need only be used for disclosure purposes if the amount financed is itemized. It is a value that is accepted as input at the beginning of the program

FINANCE CHARGE: This value is the sum of all finance charges. It is calculated in the program by subtracting from the sum of all payments the total commitment amount and then adding to that value the estimated construction loan interest and any prepaid or subsequently paid finance charges

TOTAL OF PAYMENTS: When disclosures are made under Appendix D of the Regulation, the Regulation Z Commentary permits the total of payments to reflect either the sum of the payments or the sum of the amount financed and the finance charge. The REC program calculates the total of payments by adding the amount financed to the finance charge

PMT STREAM NUMBER: For combined construction/permanent financing, the payment streams are listed in chronological order, which need not be the order in which they were entered

PMT AMOUNT: For combined construction permanent financing, the payment amount for each payment stream is listed. Advances made during the permanent phase are listed with minus signs before them

NO. OF PMTS: For combined construction/permanent financing, the number of payments in the payment stream is listed

PDS - DAYS: For combined construction/permanent financing, the number of whole unit periods and number of odd days to the first payment in the payment stream are listed

ANNUAL PERCENTAGE RATE: The APR under Appendix D of Regulation Z rules, using the actuarial method in Appendix J of the Regulation is listed

The Disclosure Information Screen indicates when the disclosed APR or finance charge is inaccurate and by how much. It will also indicate when an error is a violation. It then asks if you wish reimbursement information. Type a "y" and hit return if you do. The program will then ask for the reimbursement tolerance and default to the one appropriate for that loan (which is .25% for real estate construction and other multiple-advance loans). Hit return if you wish to accept the default value or select zero tolerance and then hit return (you will not be given a chance to change your entry once it has been made). If there is APR reimbursement involved, the screen will clear and be replaced by the Reimbursement Information Screen.

The Disclosure Information Screen will also indicate whether an understated APR or understated finance charge is subject to the 10% obvious error rule. This file states that if either the APR or the finance charge is accurate and the one that is inaccurate is 10% or less of the correct value, regulatory reimbursement will not be required (for example, a finance charge of $6,000 is disclosed as $600 or less). Although the program incorporates the obvious error rule, it still permits reimbursement calculations at your option.

If there is no APR reimbursement involved, the disclosure screen will print out the finance charge reimbursement amount (using the correct APR minus the value of the tolerance selected). The amount printed out will be zero if the finance charge reimbursement adjustment is less than $1.00. If there is an adjustment amount, it is a lump sum value that may be reimbursed on a straight-line, pro rata basis. If there is no APR adjustment, the current screen will ask whether you wish to calculate another APR. The program will not produce a separate reimbursement screen.

Documentation Printout

Normally, any screen may be printed out as hard copy if (1) a printer is connected to the PC and (2) the keys SHIFT and PRTSC are pressed simultaneously (or, on some PCS, just the key PRINT SCREEN is pressed). However, the REC program has a more effective way of obtaining printed documentation.

To obtain a hard copy printout for documentation while using the REC program, enter the small letter or capital "p" whenever either of the following two prompts are an the bottom line of the screen:

Prompt 1 – Do you wish to calculate another APR (y/n/p-print)?

Prompt 2 – 1 (another APR), 2 (another adjustment), 3 (APR Menu, P- printout)

After the letter "p" is entered, a statement will appear near the bottom of the screen as a reminder to make sure that the printer is connected, has paper and is on line. Then hit any key (except the escape key - ESC) to obtain a printout that summarizes all of the loan input and output. If you do not desire a printout after you have already entered the letter "p", hit ESC to return to the APR Menu.

Reimbursement Information Screen

This screen provides reimbursement information, but it will appear only if there is APR reimbursement involved. It requests only one item of information from you, the number of payments scheduled to have been made as of the date of reimbursement. (You will not be given the normal opportunity to change your entry once it has been made. However, you will be able to calculate another adjustment using a different entry.) *NOTE: The more important information on this screen is highlighted in reverse video.*

The following information in provided by this final screen:

ADJUSTED APR: This value is used to calculate APR reimbursement adjustments. It is the disclosed APR plus the reimbursement tolerance selected from the disclosure screen

PRORATE FACTOR: This value is the present value of advances divided by the present value of payments, as of loan date. The prorate factor is used to calculate reduced payment values. For any given loan, if you multiply each original payment amount by the prorate factor, your answer is the value each payment should be for the loan to have an APR equal to the adjusted APR (which is one of the objectives of reimbursement)

APR ADJUSTMENTS OF FINAL PMT DATE: This value is the present value of payments minus the present value of advances (that is, the lump sum APR reimbursement adjustment as of the loan date), which is then taken out to the date of the final payment (which is normally the maturity date of the loan). This value may be quite large, due to the time value of money. If no lump sum payment were made and if the consumer's payments were not changed, it would take an adjustment of this amount (paid to the consumer at the final payment date) to ensure that the overall transaction had an APR equal to the adjusted APR

NOTE: This value does not apply to variable-rate loans. If this value is less than $1.00, there is no APR reimbursement. Also, for fixed-rate loans if this value is larger than the lump sum reimbursement for an understated finance charge, generally the APR (not the finance charge) understatement is reimbursable.

PMT STREAM NUMBER, ORIG. PMT, NO. OF PMTS: The values shown under these columns repeat the information from the previous Disclosure Information Screen

ADJUSTED PMT. As discussed under Prorate Factor, this is the amount the payment should have been if the APR on the loan is to be equal to the adjusted APR. Under the lump sum/payment reduction method of reimbursement all future payments would be reduced to the adjusted payment value(s). If the payment stream involves advances, no value will be shown for the advance in this column. It will just state advance to let you know why there is no adjusted amount

PDS - DAYS: A recap of the number of whole unit periods and number of odd days to the first payment in the individual payment stream

LUMP SUM PAYMENT REDUCTION METHOD: This value represents the adjustment, per payment, of all PRIOR payments scheduled to have been made, aggregated as of the date of the last scheduled payment. It is the amount paid to the consumer if all future payments are reduced to the adjusted payment value(s). This method should be used for loans that are paid in full before their actual maturity dates. In these cases, there would be no future payment reductions

For adjustable-rate loans, this value (as of the first rate-change date) is compared to the lump sum adjustment for any finance charge understatement, and the amount of reimbursement generally is the larger of the two. If the larger value to the consumer is the APR adjustment, payments due after the rate-change date would not be reduced. The lump sum amount, as of the rate-change date, is reimbursable. However, if reimbursement is made before the rate-change date (for example, the consumer is reimbursed at month 14 and the rate-charge date is month 36), you may either (1) adjust the lump sum amount, as of the rate-change date, by determining its present value as of the date of reimbursement, or (2) determine the lump sum amount as of the reimbursement date and reduce those payments remaining up to and including the rate change date.

LUMP SUM METHOD (WITH NO FUTURE PAYMENT REDUCTIONS): This value represents the per payment adjustment of all scheduled payments, aggregated as of the date of the last scheduled payment. It in the sum of (1) the present value of per payment adjustments of remaining payments and (2) the future value of per payment adjustments of past scheduled payments. It is the amount paid to the consumer if all future payments remain unchanged

FINANCE CHARGE ADJUSTMENT: This value appears only when applicable. If the adjustment is less than $1.00, there is no finance charge reimbursement required. The finance charge adjustment is determined as follows:

-- Your selected APR tolerance is subtracted from the correct APR to obtain an adjusted APR for finance charge tolerance purposes
-- The adjusted APR is used to calculate a new payment schedule, using the original amount financed (This is a complex process that ultimately uses its own prorate factor.)

-- The total of payments of the new payment schedule is subtracted from the original total of payments. The answer

is the finance charge tolerance

-- The correct finance charge minus the disclosed finance charge and minus the finance charge tolerance equals the finance charge adjustment. The finance charge adjustment is a lump sum value. It may be divided by the number of payments to determine an aggregate lump sum adjustment to cover past payment periods. Future payments could then be reduced by the amount of per payment adjustment

Finally, this screen asks if you wish to calculate another APR, calculate another adjustment, go to the APR Menu or obtain a hard copy printout. You may obtain a printout for documentation by entering the capital or small letter "p". After the letter "p" is entered, a statement will appear near the bottom of the screen as a reminder to make sure that the printer is connected, has paper and is on line. Hit any key (except the escape key - ESC) to obtain a printout that summarizes all of the loan input and output. If you do not desire a printout after you have entered the letter "p", hit ESC to return to the APR Menu.

If a printout is not selected, hit return to start all over again, enter a 2 to calculate another adjustment or enter a 3 to quit. If you quit, the computer will return you to the APR Menu. If you hit return again to accept the default value of 3, you will exit the program. The C: prompt will appear if you are using a hard drive. Otherwise, the A: prompt will appear if there is a disk in the A drive that has DOS on it. You may then remove any disks still in the computer. (If you are not using a hard drive, you may remove a disk from the computer whenever the red light is off, but it will not hurt the REC program disk if you leave it in while you are running the program. In fact, you may find it convenient to leave the disk in to switch over to the APR program.)

EXAMPLES

THE FOLLOWING ARE EXAMPLES OF TYPICAL REIMBURSABLE SITUATIONS WHICH ILLUSTRATE THE USE OF THE OCC-APR SOFTWARE WHEN CALCULATING RESTITUTION AMOUNTS. IT IS ASSUMED THAT ALL LOAN EXAMPLES ARE NOT DELINQUENT IN ANY PAYMENTS.

Example 1 – A Residential Mortgage Transaction Where the Mortgage Guarantee Insurance Premium Is Not Disclosed in the Monthly Payment Stream

Borrower: Wayne and Carolyn Liberal

Transaction: The Liberals borrowed $27,000 at 12.8208 percent to purchase a mobile home which will be used as their principal dwelling. The Liberals gave WCB&T (Windy City Bank & Trust Company) a security interest in the mobile home (the Liberals do not own the real estate where the mobile home is located). As part of the transaction, the borrowers were required to pay an origination fee ($675), and mortgage guarantee insurance (MGIC) is required ($6.75 per month). The borrowers were also required to pay 12 months of MGIC insurance at closing. The borrowers' monthly principal and interest payment for the term of the loan (20 years) is $306.76.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed: $26,160.75

Finance Charge: $47,461.65

Total of Payments: $73,622.40

APR: 12.8208%

Payment Schedule: 240 payments at $306.76 due monthly beginning August 1, 1984

Loan Date: June 22, 1984

Example 1 (continued) OUTPUT SHEETS

** APR PROGRAM DOCUMENTATION **

Prepared By:	John B. Doe
Date:	March 6, 1990
Borrower's Name:	Wayne and Carolyn Liberal
Account Number:	67901
Name of Lender:	Windy City Bank & Trust Company
Original Creditor:	Windy City Bank & Trust Company

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed	=	26,160.75	(27,000.00 - 839.25)
Disclosed (Estimated) APR	=	12.8208	
Disclosed Finance Charge	=	47,461.65	
Payment Frequency	=	Monthly (Installment Loan)	

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	26,160.75
FINANCE CHARGE	=	47,920.65
Total of Payments	=	74,081.40
Present Value of Payments (using 12.821 % APR)	=	26,710.92

ANNUAL PERCENTAGE RATE = 13.1640 %

** VIOLATION ** The APR is understated by: 0.3432 %

** VIOLATION ** The FINANCE CHARGE is understated by: 458.99

NOTE: The repayment schedule appears on the next page.

Example 1 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
13.071 %	0.9943914832	-1,993.12

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	313.51	311.75	68	1 9
2	306.76	305.04	172	69 9

LUMP SUM / PAYMENT REDUCTION METHOD: -175.79
(This adjustment covers payment(s) 1 through 68) #

LUMP SUM METHOD (with no future payment reductions): -309.24
(This adjustment covers payment(s) 1 through 240)

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* * NOTE * *

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (i.e., the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

#68 payments had been made by the date (3-6-90) the error was discovered.

Example 2 – A Residential Mortgage Transaction Where the Loan Discount Fee Is Not Disclosed as a Prepaid Finance Charge

Borrower: Donald and Cindy Garcia

Transaction: The Garcias borrowed $80,000 to purchase their principal residence. They were able to obtain a fixed- rate of 10.25 percent by paying a 2 percent loan discount fee ($1,600). This fee was paid in cash by the Garcias, as well as the costs for an appraisal, title search, and other settlement costs. The term of the loan is 20 years.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed:	$80,000.00
Finance Charge:	$108,565.60
Total of Payments:	$188,565.60
APR:	10.25%
Payment Schedule:	240 payments at $785.69 due monthly beginning April 4, 1989
Loan Date:	March 4, 1989

Example 2 (continued) OUTPUT SHEETS
** APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: March 6, 1990
Borrower's Name: Donald and Cindy Garcia
Account Number: 40222
Name of Lender: Windy City Bank & Trust Company
Original Creditor: Windy City Bank & Trust Company

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed	=	78,400.00	(80,000.00 - 1,600.00)
Disclosed (Estimated) APR	=	10.2500	
Disclosed Finance Charge	=	108,565.60	
Payment Frequency	=	Monthly (Installment Loan)	

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	78,400.00
FINANCE CHARGE	=	110,165.60
Total of Payments	=	188,565.60
Present Value of Payments (using 10.250% APR)	=	80,038.23

ANNUAL PERCENTAGE RATE 10.5562 %

** VIOLATION ** The APR is understated by: 0.3062 %

** VIOLATION ** The FINANCE CHARGE is understated by: 1,600.00

NOTE: The repayment schedule appears on the next page.

Example 2 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
10.375%	0.9878679689	-7,600.43

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	785.69	776.16	240	1 0

LUMP SUM / PAYMENT REDUCTION METHOD: -119.98
(This adjustment covers payment(s) 1 through 12)

LUMP SUM METHOD (with no future payment reductions): -1,067.62
(This adjustment covers payment(s) 1 through 240)

FINANCE CHARGE ADJUSTMENT (using 10.431% APR): -20.37

* * NOTE * *

When both an APR and Finance Charge Adjustment appear:

Compare the life of loan APR adjustment to the life of loan Finance Charge adjustment. Reimbursement is applicable only to whichever one reflects a larger reimbursement amount.

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (i.e., the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

To determine the "payment reduction" amount for a finance charge adjustment, divide the FINANCE CHARGE ADJUSTMENT by the number of payments to get the adjustment per payment.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

Example 3 – A Discounted Variable-Rate Residential Mortgage Transaction That Did Not Have the Annual Percentage Rate Disclosed as a Composite Rate

Borrower: Jack and Judy Forest

Transaction: The Forests purchased a new home for $150,000. They financed $120,000 for 20 years. WCB&T offered a variable-rate loan tied to the rate for U.S. Treasury Securities adjusted to a constant maturity of one year with a maximum of one percent increase each year. At the time of the loan, the margin was four percentage points over the current index (6.00 percent) for a 10.00 annual percentage rate. WCB&T agreed to fix the rate at 9.00 percent the first year. After that, the loan would return to the regular margin of 4.00 percent.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed: $120,000.00

Finance Charge: $140,436.00

Total of Payments: $259,236.00

APR: 9.00%

Payment Schedule: 240 payments at $1,079.67 due monthly beginning December 3, 1988

Loan Date: November 3, 1988

Example 3 (continued) OUTPUT SHEETS

** APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: March 6, 1990
Borrower's Name: Jack and Judy Forest
Account Number: 664400
Name of Lender: Windy City Bank & Trust Company
Original Creditor: Windy City Bank & Trust Company

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed	=	120,000.00
Disclosed (Estimated) APR	=	9.0000
Disclosed Finance Charge	=	140,436.00
Payment Frequency	=	Monthly (Installment Loan)

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	120,000.00
FINANCE CHARGE	=	156,400.92
Total of Payments	=	276,400.92
Present Value of Payments (using 9.000% APR)	=	127,556.90

ANNUAL PERCENTAGE RATE = 9.8637%

** VIOLATION ** The APR is understated by: 0.8637%

** VIOLATION ** The FINANCE CHARGE is understated by: 15,964.91

NOTE: The repayment schedule appears on the next page.

Example 3 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
9.250%	0.9577415834	-33,435.68

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	1,079.67	1,034.04	12	1 0
2	1,155.46	1,106.63	228	13 0

LUMP SUM / PAYMENT REDUCTION METHOD: -571.32
(This adjustment covers payment(s) 1 through 12) #

LUMP SUM METHOD (with no future payment reductions): -5,805.83
(This adjustment covers payment(s) 1 through 240)

FINANCE CHARGE ADJUSTMENT (using 9.614 % APR): -11,180.73

* * NOTE * *

When both an APR and Finance Charge Adjustment appear:

Compare the life of loan APR adjustment to the life of loan Finance Charge adjustment. Reimbursement is applicable only to whichever one reflects a larger reimbursement amount.

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (i.e., the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

To determine the "payment reduction" amount for a finance charge adjustment, divide the FINANCE CHARGE ADJUSTMENT by the number of payments to get the adjustment per payment.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

The rate was fixed for 12 months.

Question and Answer #23 – Provides that reimbursement will be required only for the period of time before the first scheduled change in rate.

Example 4 – A Fixed-Rate Residential Mortgage Transaction Where the Financial Institution Failed to Prepare Truth in Lending Disclosures

Borrower: Emily and Ralph Broke

Transaction: The Brokes purchased a new home and financed $150,000. WCB&T agreed to finance the home at a fixed rate of 7.25 percent for 15 years. The only prepaid finance charges the Brokes were required to pay included a 1 percent origination fee ($1,500) and interest of $146.97. These prepaid fees were paid in cash.

The financial institution failed to provide any Truth in Lending disclosures on this transaction.

Information from the note:

Note Date: April 26, 1993

Interest Rate: 7.25%

Payment Schedule: Monthly payments of $1,369.29 beginning June 1, 1993

Example 4 (continued) OUTPUT SHEETS
** APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: April 2, 1996
Borrower's Name: Emily and Ralph Broke
Account Number: 213564
Name of Lender: Windy City Bank & Trust
Original Creditor: Windy City Bank & Trust

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed	=	148,351.03	(150,000.00 - 1,648.97)
Disclosed (Estimated) APR	=	7.2500	(Input contract rate)
Disclosed Finance Charge	=	98,121.17	#
Payment Frequency	=	Monthly (Installment Loan)	

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	148,351.03
FINANCE CHARGE	=	98,121.17
Total of Payments	=	246,472.20
Present Value of Payments (using 7.250% APR)	=	149,848.64

ANNUAL PERCENTAGE RATE

** VIOLATION ** The APR is understated by: 0.1627%

Note: The repayment schedule appears on the next page.

 # NOTE: The operator of the OCC-APR program must first determine what the true FINANCE CHARGE should be and input this figure as the disclosed FINANCE CHARGE. This calculation can be easily done by using the OCC-APR program. If the operator does not input the true FINANCE CHARGE (i.e. enters the disclosed FINANCE CHARGE as unknown), the program typically does not alert the operator that a violation exists.

Example 4 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
7.375%	0.9976802634	-1,040.28

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	1,369.29	1,366.11	180	1 5

LUMP SUM / PAYMENT REDUCTION METHOD: -123.61
(This adjustment cover payment(s) 1 through 35)

LUMP SUM METHOD (with no future payment reductions) : -427.87
(This adjustment covers payment(s) 1 through 180)

* * NOTE * *

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (i.e., the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

Example 5 – A Consumer Loan Payable on Demand, Where the Disclosure Was Not Prepared Based on the Alternate Maturity Date

Borrower: Mary Brown

Transaction: Ms. Mary Brown has borrowed $6,000 for personal purposes at 10 percent. The note is payable on demand, but if not sooner demanded it will be payable in annual installments of principal ($1,200) with semi-annual payments of interest. WCB&T has treated this loan as a demand loan and has based its disclosures on an assumed maturity of one year.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed:	$6,000.00
Finance Charge:	$600.00
Total of Payments:	$6,600.00
APR:	10.00%
Payment Schedule:	5 payments at $1,200 due yearly plus interest semiannually
Loan Date:	December 5, 1987

Example 5 (continued) OUTPUT SHEETS
** APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: March 6, 1990
Borrower's Name: Mary Brown
Account Number: 56789
Name of Lender: Windy City Bank & Trust
Original Creditor: Windy City Bank & Trust

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed = 6,000.00
Disclosed (Estimated) APR = 10.0000
Disclosed Finance Charge = 600.00

Payment Frequency = Multiples of a Month (Installment Loan)

DISCLOSURE INFORMATION – OUTPUT

Amount Financed = 6,000.00
FINANCE CHARGE = 1,800.00
Total of Payments = 7,800.00
Present Value of Payments = 6,000.00
(using 10.000% APR)

Pmt Stream Number	Pmt Amount	No. Of Pmts	Whole Unit Periods	Odd Days
1	300.00	1	1	0
2	1,500.00	1	2	0
3	240.00	1	3	0
4	1,440.00	1	4	0 - Error detected 3-6-90
5	180.00	1	5	0
6	1,380.00	1	6	0
7	120.00	1	7	0
8	1,320.00	1	8	0
9	60.00	1	9	0
10	1,260.00	1	10	0

ANNUAL PERCENTAGE RATE = 10.0000%

** VIOLATION ** The FINANCE CHARGE is understated by: 1,200.00

FINANCE CHARGE ADJUSTMENT (using 9.750% APR): -1,151.98

Example 5 (continued) OUTPUT SHEETS
** NOTE **

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

To determine the "payment reduction" amount for a finance charge adjustment, divide the FINANCE CHARGE ADJUSTMENT by the number of payments to get the adjustment per payment.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

Question and Answer #26 – Provides a special calculation for demand loans. Reimbursement is only required for the difference between the finance charge actually paid and the finance charge disclosed (which may be increased by the applicable finance charge reimbursement tolerance).

Calculation of Reimbursement: Error detected 3/6/90

06/05/88	Interest paid	$300	
12/05/88	Interest portion of payment	300	
06/05/89	Interest paid	240	
12/05/89	Interest portion of payment	240	
	Total finance charge paid	$1080	
	Disclosed Finance Charge	$600	
	1/4% tolerance	15	
		$615	-615
	Amount to be reimbursed		$465

(This assumes the creditor takes corrective action and demands payment on the loan and/or gives new refinancing disclosures.)

Example 6 – A Construction Loan Transaction Where the Disclosure Was Not Prepared According to Appendix D of Regulation Z

Borrower: Donald Black

Transaction: Mr. Donald Black borrowed $75,000 for the construction of his primary residence at 11 percent. The note is dated February 1, 1990, which is the date construction on his residence began. WCB&T collected a 1 percent origination fee ($750) at the time of the loan. Beginning on May 1, 1990, the end of the construction phase, the transaction will be converted to permanent financing. WCB&T has treated the construction loan and permanent financing as two separate transactions for the purpose of disclosure.

NOTE: WCB&T did not provide the disclosure for the long-term financing (as required by Regulation Z) along with the construction loan disclosure.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed:	$75,000.00
Finance Charge:	$2,062.50
Total of Payments:	$77,062.50
APR:	11.00%
Payment Schedule:	Interest due monthly beginning March 1, 1990, 1 payment of $75,000 due May 1, 1990
Loan Date:	February 1, 1990

Example 6 (continued) OUTPUT SHEETS

** RE CONSTRUCTION LOAN APR PROGRAM DOCUMENTATION **

Prepared By:	John B. Doe
Date:	May 6, 1990
Borrower's Name:	Donald Black
Account Number:	12345
Name of Lender:	Windy City Bank & Trust
Original creditor:	Windy City Bank & Trust

LOAN INFORMATION – ORIGINAL INPUT

Commitment Amount	=	75,000.00
Annual Simple Interest Rate	=	11.00
Prepaid Finance Charge	=	750.00
Construction-Phase Accrual System	=	Whole Months (360/360)
Number of Months in Construction Phase	=	3
Number of Unit Periods	=	1
Number of Odd Days	=	0
Construction Interest	=	1,031.25
Disclosed (Estimated) APR	=	11.0000
Disclosed Finance Charge	=	2,062.50
Payment Frequency	=	Construction-Only Loan

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	74,250.00
Prepaid Finance Charge	=	750.00
FINANCE CHARGE	=	1,781.25
Total of Payments	=	76,031.25

The disclosure must state when interest is due and include the amount and timing of any FC paid separately after consummation, for example, one payment of principal of 75,000.00 and interest due monthly.

ANNUAL PERCENTAGE RATE = 19.3878%

** VIOLATION ** The APR is understated by: 8.3878%

** VIOLATION ** The FINANCE CHARGE is overstated by: 281.25

NOTE: The present OCC-APR program would disclose an overstated finance charge. However, with the recent revision of Section 139 of the Truth in Lending Act, any overstatement of APR and/or finance charge would not be cited as a violation.

NOTE: The repayment schedule appears on the next page.

Example 6 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
11.250%	0.9805961071	-747.66

** NOTE **

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (i.e., the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (i.e., determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (i.e., its present value is determined).

Example 7 – A Construction/Permanent Loan Transaction Where the Disclosure Did Not Properly Disclose the Origination Fee as a Finance Charge

Borrower: Jim Lane

Transaction: On July 12, 1991, Mr. Lane borrowed $50,000 at 10.5 percent for the construction (5 month construction period) and permanent financing of his new residence (30 years). The construction and permanent financing were disclosed as one transaction. WCB&T collected a prepaid finance charge of 2 points ($2,500), which was paid in cash. Monthly amortization payments for 30 years were calculated to be $457.37.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed: $50,000.00

Finance Charge: $115,746.95

Total of Payments: $165,746.95

APR: 10.50%

Payment Schedule: Interest on the amount of credit outstanding during the construction period will be monthly, followed by -- 360 payments of 457.37 beginning January 12, 1992

Loan Date: July 12, 1991

Example 7 (continued) OUTPUT SHEETS

** RE CONSTRUCTION LOAN APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: July 12, 1991
Borrower's Name: Jim Lane
Account Number:
Name of Lender: Windy City Bank & Trust
Original Creditor: Windy City Bank & Trust

LOAN INFORMATION – ORIGINAL INPUT

Commitment Amount	=	50,000.00
Annual Simple Interest Rate	=	10.50
Prepaid Finance Charge	=	2,500.00
Construction-Phase Accrual System	=	Whole Months (360/360)
Construction Interest	=	1,093.75
Disclosed (Estimated) APR	=	10.5000
Disclosed Finance Charge	=	115,746.95
Payment Frequency	=	Monthly (Installment Loan)

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	47,500.00
Prepaid Finance Charge	=	2,500.00
FINANCE CHARGE	=	118,246.95
Total of Payments	=	165,746.95

The disclosure must state when interest is due, for example, monthly, and should include the amount and timing of any FC paid separately during construction.

ANNUAL PERCENTAGE RATE = 11.1419%

** VIOLATION ** The APR is understated by: 0.6419%

** VIOLATION ** The FINANCE CHARGE is understated by: 2,500.00

Note: The repayment schedule appears on the next page.

Example 7 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
10.750%	0.9685049600	-38,261.99

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	457.37	442.97	360	3 15

LUMP SUM / PAYMENT REDUCTION METHOD: -456.12
(This adjustment covers payment(s) 1 through 28)

LUMP SUM METHOD (with no future payment reductions) -1,980.86
(This adjustment covers payment(s) 1 through 360)

* * NOTE * *

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (that is, the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (that is, determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (that is, its present value is determined).

Example 8 – Home Equity Conversion Mortgages (a/k/a Reverse Mortgages or Reverse Annuity Mortgages)

Instructions:

Due to the uniqueness of reverse mortgage instruments, special instructions are needed to run the OCC-APR program (Version 3.3) to review disclosure accuracy. Therefore, the following includes instructions for reviewing the accuracy of annual percentage rate (APR) and finance charge disclosures for a typical reverse mortgage:

1) Enter any initial disbursement at consummation to the borrower(s) as the **AMOUNT FINANCED** (positive figure) – do not include prepaid finance charges that are financed.

   NOTE: If the prepaid finance charges are paid out of pocket by the borrower(s) (paid in cash), subtract these fees from the initial disbursement amount, with the net result entered as the AMOUNT FINANCED – this may be a negative figure.

Example:	Initial Disbursement Amount	$ 400.00
	Prepaid Finance Charges (Paid in cash)	$1,200.00
	Net [Amount Financed]	-$ 800.00

2) Enter the disclosed **APR**.

3) Enter the disclosed **FINANCE CHARGE**.

4) Enter the payment frequency.

5) For each **PAYMENT STREAM** (with the exception of the final disbursement), enter the payment amount (disbursement) as a "NEGATIVE" number. Enter the corresponding number of payments for each payment stream. Enter the other appropriate **UNIT PERIOD** information.

6) For the final **PAYMENT STREAM** (final disbursement), subtract the final disbursement amount from the **TOTAL OF PAYMENTS** figure. Then enter this net figure as the payment amount (positive figure). Enter the number of payments as "1."

Example:	Total of Payments	$74,200.00
	Final Disbursement	$ 822.01
	Amount Entered	$73,377.99

7) When the program asks for the **REIMBURSEMENT TOLERANCE**, use the number which the program defaults to. DO NOT CHANGE THIS FIGURE.

8) When the program asks for the **NUMBER OF PRIOR PAYMENTS**, enter the number "1."

NOTE: The example illustrates a home equity conversion mortgage (reverse mortgage) that is reimbursable, using the OCC-APR software.

Example 8 – Home Equity Conversion Mortgages (a/k/a Reverse Mortgages or Reverse Annuity Mortgages) (continued)

Borrower: Jane Smith

Transaction: Ms. Smith applied and received a reverse mortgage on the equity that existed in her home. Ms. Smith requested monthly advances of $400.00, with an initial disbursement of $400.00. The final disbursement of $822.01 will be made on February 2, 2000. Ms. Smith financed all prepaid finance charges (closing costs) totaling $2,322.00. The bank calculated the interest for the full term of the loan at $28,255.99, with interest beginning to accrue from March 4, 1991.

Information disclosed by the financial institution on the TIL Disclosure Statement:

Amount Financed: $44,460.01

Finance Charge: $29,739.99

Total of Payments: $74,200.00

APR: 10.56%

Note: Closing Costs totaled $2,322

Payment Schedule: 1 payment of $400 is the initial disbursement
106 payments of $400 are the monthly disbursements beginning April 4, 1991 ($42,400)
1 payment of $822.01 is the final disbursement
$28,255.99 interest from March 4, 1991 to maturity

Loan Date: February 27, 1991

Example 8 (continued) OUTPUT SHEETS

** APR PROGRAM DOCUMENTATION **

Prepared By: John B. Doe

Date: June 5, 1992
Borrower's Name: Jane Smith
Account Number: 10149
Name of Lender: Windy City Bank & Trust
Original Creditor: Windy City Bank & Trust

LOAN INFORMATION – ORIGINAL INPUT

Amount Financed	=	42,800.00 #
Disclosed (Estimated) APR	=	10.5600
Disclosed Finance Charge	=	29,739.99
Payment Frequency	=	Monthly (Installment Loan)

DISCLOSURE INFORMATION – OUTPUT

Amount Financed	=	42,800.00
FINANCE CHARGE	=	30,577.99
Total of Payments	=	73,377.99
Present Value of Payments (using 10.560% APR)	=	1,238.47

ANNUAL PERCENTAGE RATE = 11.1341%

** VIOLATION ** The APR is understated by: 0.5741%

** VIOLATION ** The FINANCE CHARGE is understated by: 838.00

Note: The repayment schedule appears on the next page.

Input 400.00 as the AMOUNT FINANCED.

Example 8 (continued) OUTPUT SHEETS

** TRUTH IN LENDING REIMBURSEMENT DOCUMENTATION **

ADJUSTED APR	PRORATE FACTOR	APR ADJUSTMENT AS OF FINAL PMT DATE
10.810%	0.9833980291	-1,218.22

PMT STREAM NO.	ORIG. PMT	ADJUSTED PMT	NO. OF PMTS	PDS - DAYS
1	-400.00	(advance)	106	1 0
2	73,377.99#	72,159.77	1	107 0

LUMP SUM / PAYMENT REDUCTION METHOD: -1,218,22
(This adjustment covers payment(s) 1 through 1)

LUMP SUM METHOD (with no future payment reductions) -1,218.22
(This adjustment covers payment(s) 1 through 1)

* * NOTE * *

For fixed-rate loans, the life of loan APR adjustment is the APR ADJUSTMENT AS OF FINAL PAYMENT DATE. For variable-rate loans the life of loan APR adjustment is the adjustment as of the end of the first rate change period (that is, the lump sum value from the LUMP SUM / PAYMENT REDUCTION METHOD).

Once the adjustment is identified, it may be calculated by using either the Lump Sum or Lump Sum/Payment Reduction adjustment method.

For variable-rate loans, if the rate change date has not yet occurred, the lump sum payment applicable to the entire rate change period may be calculated as of the date of adjustment (that is, determine its present value for an APR adjustment and, if applicable, calculate the prorated share of the finance charge adjustment).

For single payment loans, adjust the payment or, if the payment has not yet been made, the creditor may calculate the adjustment as a lump sum payment as of the date of adjustment (that is, its present value is determined).

#74,200.00
- 822.01
73,377.99

Input 73,377.99 as the payment amount for payment stream 2.